

IV. 11.51

Mr. Criscom has agreed to
the sending of Brewster's journals
to Houghton (first have Dr. Roman's
approval)

First 5 vols. lost for many years.
Smith O. Dexter man who borrowed
them? (Information given to me by
Robert L. Work) Jessie Bell MacKenzie

16 Apr '51

Call No.

MCZ-E

Series.....

Publ.

Vol.

No.

Date

1917

Author
Society
Institution

Eastman, C. R.

Title

Fossil Fishes in
the U.S. Nat. Mus.

M. C. Z. LIBRARY

Signature

Prentiss J. Shedd

Address

43 Maplewood,
Brookline 15, Mass.

Borrower's Status

Class - Officer - Special

19

*Merula
migratoria*

SB-97419 (2)

Merula migratoria.

B.H. = Balls Hill

1898.

January

February

March

April

May

June

October

November

Concord
1711, near Ball's Hill, 1898.
a. 13² 14¹ 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
March 13² 14¹ 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
April 13² 14¹ 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
May 13² 14¹ 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
June 13² 14¹ 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
October 13² 14¹ 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
November 13² 14¹ 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²

1899.

January

February

March

April

April

May

May

June

More reported.
a. 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
February 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
March 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
April 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
April 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
May 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
May 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
June 15² 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²

July

August

September

October

"

November

"

December

July 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
August 8² 9³ 10³ 11³ 12³ 13³ 14³ 15³ 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
September 8² 9³ 10³ 11³ 12³ 13³ 14³ 15³ 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
October 3² 5² 11³ 12³ 16³ 19³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
" 12³ 13³ 14³ 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
November 8² 9³ 10³ 11³ 12³ 13³ 14³ 15³ 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
" 5² 6³ 7³ 8³ 9³ 10³ 11³ 12³ 13³ 14³ 15³ 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²
December 10³ 11³ 12³ 13³ 14³ 15³ 16³ 17³ 18³ 19³ 20³ 21¹⁰ 22³ 23⁸ 24¹⁰ 25²⁵ 27¹⁰ 28¹⁵ 29¹⁵ 30⁶ 31¹²

April

May

June

July

August

Nov.

Res.

Time

7.4

km 1

21.1

2

May

June

July

ling

Sept.

Ma

June

Oct.

Summed

$5^{\circ} 6' - 6^{\circ} \frac{5}{10} - 11^{\circ} 8' - 26^{\circ} \frac{10}{10} - 30^{\circ} \frac{12}{10} - 188^{\circ} 24' - 25^{\circ} \frac{12}{10} - 26^{\circ} \frac{20}{10} - 27^{\circ} 20' - 1891.$
 $5^{\circ} 8' - 6^{\circ} \frac{6}{10} - 8^{\circ} \frac{6}{10} - 10^{\circ} \frac{12}{10} - 11^{\circ} \frac{12}{10} - 14^{\circ} \frac{12}{10} - 16^{\circ} \frac{10}{10} - 17^{\circ} \frac{10}{10} - 29^{\circ} \frac{20}{10} - 30^{\circ} \frac{10}{10} - 1889. 21^{\circ} 15' - 22^{\circ} 15' - 23^{\circ} 15' - 24^{\circ} 15' - 25^{\circ} 15' - 26^{\circ} 15' - 27^{\circ} 15' - 28^{\circ} 15' - 29^{\circ} 15' - 30^{\circ} 15' - 1891.$
 $6^{\circ} 10' - 2^{\circ} 4' - 3^{\circ} 4' - 4^{\circ} 4' - 5^{\circ} 4' - 6^{\circ} 4' - 7^{\circ} 4' - 8^{\circ} 4' - 9^{\circ} 4' - 10^{\circ} 4' - 11^{\circ} 4' - 12^{\circ} 4' - 13^{\circ} 4' - 14^{\circ} 4' - 15^{\circ} 4' - 16^{\circ} 4' - 17^{\circ} 4' - 18^{\circ} 4' - 19^{\circ} 4' - 20^{\circ} 4' - 21^{\circ} 4' - 22^{\circ} 4' - 23^{\circ} 4' - 24^{\circ} 4' - 25^{\circ} 4' - 26^{\circ} 4' - 27^{\circ} 4' - 28^{\circ} 4' - 29^{\circ} 4' - 30^{\circ} 4' - 1889.$

$$2^6 \cdot 3^2 \cdot 5^2 \cdot 6^4 \cdot 7^6 \cdot 11^4 \cdot 17^2 \cdot 19^{1000000} - 20^2 \cdot 22^2 \cdot 23^2 \cdot 25^2 \cdot 27^2 \cdot 30^2 = 1889.$$

^{69.} 14 ^{69.} 2 ^{69.} 3 ^{69.} 5 ^{69.} 6 ^{69.} 7 ^{69.} 8 ^{69.} 9 ^{69.} 10 ^{69.} 11 ^{69.} 12 ^{69.} 13 ^{69.} 14 ^{69.} 16 ^{69.} 20 ^{69.} 21 ^{69.} 24 ^{69.} 27 ^{69.} 28 ^{69.} 29 ^{69.} 30 ^{69.} 1889 m. migratoria

1⁶⁹/₂ - 4⁶⁹/₂ - 7⁶⁹/₂ - 26¹³/₇ - 1889 - 5¹⁰/₂ - 6⁴⁰/₂ - 7¹⁰/₂ - 8³⁰/₂ - 23¹/₂ - 1891

[illegible]

Arnold Arboretum M.H. Mass. Frost P. Mel. Feb. 2, 1911
1/2 dec'd by 17 1/2 1890 1/2 (15) 90 (50) 17 1/2 1893

| Harv | Cg. | B | C | W. | W | B. & L. | B. C. | Wm |
|------|-----|-----|-----|-----|------|---------|-------|-----|
| 226 | 221 | 221 | 251 | 234 | 2218 | 206 | 206 | 21⑨ |

22 23 24 25 * (Boris) 27 28 29 30 31 10/71

12¹² 13¹³ 14¹⁴ 15¹⁵ 16¹⁶ 17¹⁷ 18¹⁸ 19¹⁹ 20²⁰ 21²¹ 22²² 23²³ 24²⁴ 25²⁵ 26²⁶ 27²⁷ 28²⁸ 29²⁹ 30³⁰ 31³¹ 32³² 33³³ 34³⁴ 35³⁵ 36³⁶ 37³⁷ 38³⁸ 39³⁹ 40⁴⁰ 41⁴¹ 42⁴² 43⁴³ 44⁴⁴ 45⁴⁵ 46⁴⁶ 47⁴⁷ 48⁴⁸ 49⁴⁹ 50⁵⁰ 51⁵¹ 52⁵² 53⁵³ 54⁵⁴ 55⁵⁵ 56⁵⁶ 57⁵⁷ 58⁵⁸ 59⁵⁹ 60⁶⁰ 61⁶¹ 62⁶² 63⁶³ 64⁶⁴ 65⁶⁵ 66⁶⁶ 67⁶⁷ 68⁶⁸ 69⁶⁹ 70⁷⁰ 71⁷¹ 72⁷² 73⁷³ 74⁷⁴ 75⁷⁵ 76⁷⁶ 77⁷⁷ 78⁷⁸ 79⁷⁹ 80⁸⁰ 81⁸¹ 82⁸² 83⁸³ 84⁸⁴ 85⁸⁵ 86⁸⁶ 87⁸⁷ 88⁸⁸ 89⁸⁹ 90⁹⁰ 91⁹¹ 92⁹² 93⁹³ 94⁹⁴ 95⁹⁵ 96⁹⁶ 97⁹⁷ 98⁹⁸ 99⁹⁹ 100¹⁰⁰ 101¹⁰¹ 102¹⁰² 103¹⁰³ 104¹⁰⁴ 105¹⁰⁵ 106¹⁰⁶ 107¹⁰⁷ 108¹⁰⁸ 109¹⁰⁹ 110¹¹⁰ 111¹¹¹ 112¹¹² 113¹¹³ 114¹¹⁴ 115¹¹⁵ 116¹¹⁶ 117¹¹⁷ 118¹¹⁸ 119¹¹⁹ 120¹²⁰ 121¹²¹ 122¹²² 123¹²³ 124¹²⁴ 125¹²⁵ 126¹²⁶ 127¹²⁷ 128¹²⁸ 129¹²⁹ 130¹³⁰ 131¹³¹ 132¹³² 133¹³³ 134¹³⁴ 135¹³⁵ 136¹³⁶ 137¹³⁷ 138¹³⁸ 139¹³⁹ 140¹⁴⁰ 141¹⁴¹ 142¹⁴² 143¹⁴³ 144¹⁴⁴ 145¹⁴⁵ 146¹⁴⁶ 147¹⁴⁷ 148¹⁴⁸ 149¹⁴⁹ 150¹⁵⁰ 151¹⁵¹ 152¹⁵² 153¹⁵³ 154¹⁵⁴ 155¹⁵⁵ 156¹⁵⁶ 157¹⁵⁷ 158¹⁵⁸ 159¹⁵⁹ 160¹⁶⁰ 161¹⁶¹ 162¹⁶² 163¹⁶³ 164¹⁶⁴ 165¹⁶⁵ 166¹⁶⁶ 167¹⁶⁷ 168¹⁶⁸ 169¹⁶⁹ 170¹⁷⁰ 171¹⁷¹ 172¹⁷² 173¹⁷³ 174¹⁷⁴ 175¹⁷⁵ 176¹⁷⁶ 177¹⁷⁷ 178¹⁷⁸ 179¹⁷⁹ 180¹⁸⁰ 181¹⁸¹ 182¹⁸² 183¹⁸³ 184¹⁸⁴ 185¹⁸⁵ 186¹⁸⁶ 187¹⁸⁷ 188¹⁸⁸ 189¹⁸⁹ 190¹⁹⁰ 191¹⁹¹ 192¹⁹² 193¹⁹³ 194¹⁹⁴ 195¹⁹⁵ 196¹⁹⁶ 197¹⁹⁷ 198¹⁹⁸ 199¹⁹⁹ 200²⁰⁰ 201²⁰¹ 202²⁰² 203²⁰³ 204²⁰⁴ 205²⁰⁵ 206²⁰⁶ 207²⁰⁷ 208²⁰⁸ 209²⁰⁹ 210²¹⁰ 211²¹¹ 212²¹² 213²¹³ 214²¹⁴ 215²¹⁵ 216²¹⁶ 217²¹⁷ 218²¹⁸ 219²¹⁹ 220²²⁰ 221²²¹ 222²²² 223²²³ 224²²⁴ 225²²⁵ 226²²⁶ 227²²⁷ 228²²⁸ 229²²⁹ 230²³⁰ 231²³¹ 232²³² 233²³³ 234²³⁴ 235²³⁵ 236²³⁶ 237²³⁷ 238²³⁸ 239²³⁹ 240²⁴⁰ 241²⁴¹ 242²⁴² 243²⁴³ 244²⁴⁴ 245²⁴⁵ 246²⁴⁶ 247²⁴⁷ 248²⁴⁸ 249²⁴⁹ 250²⁵⁰ 251²⁵¹ 252²⁵² 253²⁵³ 254²⁵⁴ 255²⁵⁵ 256²⁵⁶ 257²⁵⁷ 258²⁵⁸ 259²⁵⁹ 260²⁶⁰ 261²⁶¹ 262²⁶² 263²⁶³ 264²⁶⁴ 265²⁶⁵ 266²⁶⁶ 267²⁶⁷ 268²⁶⁸ 269²⁶⁹ 270²⁷⁰ 271²⁷¹ 272²⁷² 273²⁷³ 274²⁷⁴ 275²⁷⁵ 276²⁷⁶ 277²⁷⁷ 278²⁷⁸ 279²⁷⁹ 280²⁸⁰ 281²⁸¹ 282²⁸² 283²⁸³ 284²⁸⁴ 285²⁸⁵ 286²⁸⁶ 287²⁸⁷ 288²⁸⁸ 289²⁸⁹ 290²⁹⁰ 291²⁹¹ 292²⁹² 293²⁹³ 294²⁹⁴ 295²⁹⁵ 296²⁹⁶ 297²⁹⁷ 298²⁹⁸ 299²⁹⁹ 300³⁰⁰ 301³⁰¹ 302³⁰² 303³⁰³ 304³⁰⁴ 305³⁰⁵ 306³⁰⁶ 307³⁰⁷ 308³⁰⁸ 309³⁰⁹ 310³¹⁰ 311³¹¹ 312³¹² 313³¹³ 314³¹⁴ 315³¹⁵ 316³¹⁶ 317³¹⁷ 318³¹⁸ 319³¹⁹ 320³²⁰ 321³²¹ 322³²² 323³²³ 324³²⁴ 325³²⁵ 326³²⁶ 327³²⁷ 328³²⁸ 329³²⁹ 330³³⁰ 331³³¹ 332³³² 333³³³ 334³³⁴ 335³³⁵ 336³³⁶ 337³³⁷ 338³³⁸ 339³³⁹ 340

[illegible]

$1^{\circ} 5^{\circ} 6^{\circ} 7^{\circ} 8^{\circ} 9^{\circ} 10^{\circ} 11^{\circ} 12^{\circ} 13^{\circ} 14^{\circ} 15^{\circ} 16^{\circ} 18^{\circ} 19^{\circ} 20^{\circ} 22^{\circ} 24^{\circ} 25^{\circ} 26^{\circ} 30^{\circ} 33^{\circ} 36^{\circ}$
4 elements 64 29 64 7.5 *Monthly* *Grain* 64 *m. v.*

15. 638 17. 8 19. 110 21. 13 23. 14 25. 16 27. 17 29. 20 31. 21 33. 23 35. 24 37. 26 39. 27 41. 29 43. 30 45. 1890.

21²¹ 31¹ 6² 7⁴ 8⁴ 10¹ 11¹ 13² 14² 17¹⁰ 19² 20¹ 22¹⁰ 25² 28² 29¹⁰ 1890.

1¹⁰ - 2⁵⁰ - 3³⁰ - 4^{125 c. 7²⁰ - 9¹⁰ - 11²⁰ - 12¹⁰⁰ - 16²⁰ - 1890}

19² 22¹⁰ 25²⁰ 28 29 31² 189

North Pine Cg. Cp. G.
16 26 35 4 7 8 young on wing 1891.

(continued)

Milton ^{Surveyor} Ch. Concord
 $\frac{4}{5} \frac{10}{11} \frac{30}{8(25)} 17 \frac{12}{1891} \sqrt{16 \frac{10}{17} \frac{8}{18} \frac{15}{19} \frac{30}{20} \frac{50}{21} \frac{25}{22} \frac{25}{23} \frac{30}{24} \frac{100}{25} \frac{20}{26} \frac{10}{28} \frac{29}{29} 1891$

Commodore (S)
30³ - 31² 1892

Merula migratoria.

1892

January

February

March 11^③ 20^⑤ 22^② 23^③ 26^④ (scattered) - 28^① - 29^④ 30^④ 31^⑥ Concord.

April 1^⑤ 3^⑧ 4^⑤ 5^⑦ 7^⑧ 8^⑤ 9^⑧ 10^⑧ 11^⑧ 12^⑧ 13^⑤ 14^④ 15^③ 17^⑥ 18^⑥ 20^⑤ 21^⑤ 24^② 25^⑥ 26^⑥ 28^③ 30^③ Concord M. migratoria

May 1^⑤ 2^⑤ 3^⑤ 4^⑤ 5^⑥ 6^⑤ 7^⑤ 8^⑤ 9^⑤ 10^⑤ 16^⑤ 17^⑤ 18^⑤ 19^⑤ 20^⑤ 21^⑤ 22^⑤ 23^⑤ 24^⑤ 25^⑤ 28^⑤ 29^⑤ 30^⑤ 31^⑤ Concord

June 1^④ 2^④ 3^④ 4^④ 5^④ 6^④ 7^④ 8^④ 9^④ 10^④ 12^④ 13^④ 14^④ 15^④ 16^④ 17^④ 18^④ 19^④ 20^④ 21^④ 22^④ 23^④ 24^④ 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ 31^④ Concord

July 1^③ 2^③ 3^③ 4^③ 5^③ 6^③ 7^③ 8^③ 9^③ 10^③ 11^③ 12^③ 13^③ 14^③ 15^③ 16^③ 17^③ 18^③ 19^③ 20^③ 21^③ 22^③ 23^③ 24^③ 25^③ 26^③ 27^③ 28^③ 29^③ 30^③ 31^③ Concord

August 1^④ 2^④ 3^④ 4^④ 12^④ 13^④ 14^④ 15^④ 17^④ 19^④ 20^④ 21^④ 22^④ 24^④ 26^④ 28^④ 29^④ 30^④ 31^④ Concord

September 1^④ 3^④ 4^④ 5^④ 6^④ 7^④ 8^④ 9^④ 11^④ 12^④ 13^④ 16^④ 18^④ 20^④ 22^④ 23^④ 24^④ 25^④ 28^④ 30^④ 31^④ Concord

October 1^④ 2^④ 4^④ 6^④ 7^④ 8^④ 9^④ 10^④ 12^④ 14^④ 15^④ 17^④ 18^④ 19^④ 21^④ 22^④ 23^④ 24^④ 25^④ 27^④ 28^④ 30^④ Concord

November 1^④ 3^④ 7^④ 9^④ 10^④ 13^④ Concord

December

1893.

January 10^③ (Huntington Mass) 28^③ (Cambridge do) 29^③ (Longwood do) 29^③ (Wilmington do) 29^③ (Hobbs do)

February 4^③ (Huntington Mass) 12^③ (Cambridge do) 12^③ (Longwood do) 12^③ (Wilmington do) 12^③ (Hobbs do)

March 9^③ (Huntington Mass) 14^③ (Cambridge do) 14^③ (Longwood do) 14^③ (Wilmington do) 14^③ (Hobbs do)

April 1^④ 2^④ 3^④ 4^④ 7^④ 8^④ 9^④ 10^④ 11^④ 12^④ 13^④ 14^④ 15^④ 16^④ 17^④ 18^④ 19^④ 20^④ 21^④ 22^④ 23^④ 24^④ 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ Concord

May 1^④ 2^④ 3^④ 4^④ 5^④ 6^④ 7^④ 8^④ 9^④ 10^④ 11^④ 12^④ 13^④ 14^④ 15^④ 16^④ 17^④ 18^④ 19^④ 20^④ 21^④ 22^④ 23^④ 24^④ 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ Concord

June 26^④ 27^④ 28^④ 29^④ 30^④ Concord

July 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ Concord

August 1^④ 2^④ 3^④ 4^④ 5^④ 6^④ 7^④ 8^④ 9^④ 10^④ 11^④ 12^④ 13^④ 14^④ 15^④ 16^④ 17^④ 18^④ 19^④ 20^④ 21^④ 22^④ 23^④ 24^④ 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ Concord

September 2^④ 3^④ 4^④ 5^④ 6^④ 7^④ 8^④ 9^④ 10^④ 11^④ 12^④ 13^④ 14^④ 15^④ 16^④ 17^④ 18^④ 19^④ 20^④ 21^④ 22^④ 23^④ 24^④ 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ Concord

October 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ Concord

November 1^④ 2^④ 3^④ 4^④ 5^④ Concord

December 7^④ 8^④ 9^④ 10^④ 11^④ 12^④ 13^④ 14^④ 15^④ 16^④ 17^④ 18^④ 19^④ 20^④ 21^④ 22^④ 23^④ 24^④ 25^④ 26^④ 27^④ 28^④ 29^④ 30^④ Concord

Merula migratoria

1894.

January

February

March

April

May

June

July

August

September

October

November

December

1895.

January

February

March

April

Mary

June

July

Aug.

Sept.

Oct.

Nov.

Dec.

26 "after this
have continually"
Faxone

Concord Cg. Concord E. Bay Barnstable Cd. Cg. Cd. Cd. Cg. C.
 $T^{10} 4^{10} 5^{10} 6^{10}$ $8^2 - 10^{10}$ $12^{12} 13^{12} 14^{10}$ $15^{10} - 16^{12}$ $18^{10} 20^{10}$ 21^{10} 26^{12} 27^{10} 29^{10} 30^{10}
 Coast of N. America. Massachusetts

$3^6 \ 4^8 \ 5^{10} \ 8^{15} \ 9^{20} \ 10^{15} \ 11^8$

3° 4° 5^{12} 6^{10} 7^{11} 8^{12} 9^{10} 10^{11} 11^{12} 12^{13} 13^{14} 14^{15} 15^{16} 16^{17} 17^{18} 18^{19} 19^{20} 20^{21} 21^{22} 22^{23} 23^{24} 24^{31}
 3° 4° 5° 6° 7° 8° 9° 10° 11° 12° 13° 14° 15° 16° 17° 18° 19° 20° 21° 22° 23° 24° 25° 26° 27° 28° 29° 30° 31°

6.7. 12⁶ 13⁶ 17⁶ 18⁵ 19⁵ 20^⑨ 21⁶ 25¹ 26^⑧ 27⁴

1st 4th 6th 13th 15th 20th 24th (river bank)

Arlington
 29 or 30 / A. G. Gibson

Deddon W. Cg. Cg. Cd.
 16³ 17³ 18³ 19³ 20³ 21³ 22³ 23³ 24³ 25³ 26³ 27³ 28³ 29³ 30³
 1³ 2³ 3³ 4³ 5³ 6³ 7³ 8³ 9³ 10³ 11³ 12³ 13³ 14³ 15³ 16³ 17³ 18³ 19³ 20³ 21³ 22³ 23³ 24³ 25³ 26³ 27³ 28³ 29³ 30³

[illegible]

3⁵ 10⁵
Falsivittis One golden Canary
1, 2, 3, 4, 5⁴ 16⁴ 7⁴ 8⁴ 9⁴ 10⁴ 11⁴ 12⁴ 13⁴ 20^{20m} 21⁴ 22⁴ 23⁴ 24⁴ 26⁴

$9 \cdot 3^{(9)} \cdot 5^{(2)} \cdot 6^{(12)} \cdot 7^{(12)} \cdot 8^{(12)} \cdot 9^{(3)} \cdot 10^{(11)} \cdot 12^{(8)} \cdot 13^{(14)} \cdot 14^{(26)} \cdot 15^{(12)} \cdot 16^{(12)} \cdot 18^{(10)} \cdot 19^{(6)} \cdot 20^{(8)} \cdot 21^{(50)}$
 $22^{(16)}$
 $23^{(2)} \cdot 25^{(2)} \cdot 26^{(26)}$

1st 2nd 3rd 4th 5th 6th 7th Concord

15-10 a. - Hoffmann

M. migratoria

Merula migratoria

1896.

Tannoy

February 11 (Hebrew House)

March

April 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 25th 26th 27th 28th Continued 1876

May $\overset{Cg}{1^*} \overset{Cd}{2^*} \overset{Cg}{3} \overset{Cg}{4} \overset{Cg}{5} \overset{Cg}{9^4}$

June 28th 1940.

July

August C. 1st 3rd 5th

September

October 7² 11¹⁵ 12⁶ 13¹ 14² 20⁴⁴ 21³ 22¹ 23¹ 24¹ 25⁶ 26¹ 27³ 28² 29² 30⁴ 31²

November Cg. Concord
10 albino 23 1 heard
(Balls Hill)

Decembre

1897

January

February

| C. | C. | B. ¹² / ₁₅ | C. | Hammington | G. | G. | G. | G. | G. | C. | Grand | | |
|-------|----------------------|----------------------------------|----------------------------------|-----------------|--|----|----|----|----|-----------------|-----------------|-----------------|------------------|
| March | 13 ^(Bath) | 18 ^{do} | 22 ²⁷ / _{*1} | 23 [*] | 22 ²⁴ / _{Bedmington} | 24 | 25 | 26 | 27 | 28 ² | 29 ¹ | 30 ² | 31 ¹³ |

April 1¹² 2¹⁰ 3²⁰ 4²⁰ 5¹⁵ 6¹⁵ 7¹⁵ 8¹² 9² 10² 11³ 12¹⁵ 21³ 22³ 23³ 24³ 25¹ 26¹⁰ ^{Novel} ^{Howard}

April 13⁴_(2*) 14⁴_(2*) 15³_(1*) 16³_(1*) 17³_(1*) 18³ Our garden Cambridge 27⁶_{*} 28³_{*} 29²_{*} 30²_{*} Concord.

May 1st 2nd 3rd 4th 5th 6th 7th 8th 9th

June

July

August 18^b 19^x 20^b 25^x 26^b 27^x 28^b 30^x 31^x Our garden, Cambridge.

September

October $\overbrace{6^2 8^3}^{C_2} / 12^2 15^1 17^2 \overbrace{19^3 20^2 21^1 22^1 23^1 27^1 28^{1/2}}^{Ball's Hill, Concord}$

November 8⁽²⁾ 12⁽⁶⁾ 20⁽⁸⁾ 21⁽⁵⁾ 22^{hd} 23^{feeding berries & ground juniper} Concord.

December 10⁽⁶⁾ (Pat. Planning) Balls H., Cal. 16⁽²⁾ (Pat. Planning) Balls H., Cal.

$\zeta_2 = \text{common}$

1904 March 20¹ 24¹ 25¹ 26² 28² 29¹ 30¹ 31² April 1² 2⁴ 3⁵ 6⁷ 7⁸ 8⁹ 9¹⁰ 11³ (75° N. over)
(April) 12⁶ 13⁴ 14⁶ 15⁶ 16⁵ 18⁵ 19⁶ 20⁵ 21⁶ 22⁶ 23⁶ 25¹² 26⁶ 28² 29² 30² May 2³ 3⁵
June 4⁵ 5⁶ 6⁷ 8⁸ 9⁸ 10¹¹ 11¹³ 14¹⁵ 15¹² 16¹¹ 17¹⁰ 18¹⁰ 19¹⁰ 20¹¹ 21¹² 22¹³ 23¹³ 24¹³ 27¹³ 28¹³ 29¹³ 30¹³
July 1⁵ 2⁵ 3⁵ 4⁵ 5⁵ 6⁵ 7⁵ 8⁵ 9⁵ 10⁵ 11⁵ 12⁵ 13⁵ 14⁵ 15⁵ 16⁵ 17⁵ 18⁵ 19⁵ 20⁵ 21⁵ 22⁵ 23⁵ 24⁵ 25⁵ 26⁵ 27⁵ 28⁵ 29⁵ 30⁵
August 1⁵ 2⁵ 3⁵ 4⁵ 5⁵ 6⁵ 7⁵ 8⁵ 9⁵ 10⁵ 11⁵ 12⁵ 13⁵ 14⁵ 15⁵ 16⁵ 17⁵ 18⁵ 19⁵ 20⁵ 21⁵ 22⁵ 23⁵ 24⁵ 25⁵ 26⁵ 27⁵ 28⁵ 29⁵ 30⁵

Merula migratoria

Roost

1889 Mass.

July 19 Cambridge

This evening I visited the Robins' roost in Norton's woods. The place to which the birds resort may be described as follows:—

A mixed growth of oaks and white pines ~~not~~ ^{on} low but not wet ground covering two acres, the trees fifty ~~by~~ ^{to} seventy-five feet high, growing thickly together with dense ^{undergrowth} beneath; to the east, north and south, cultivated ground with scattered ornamental trees and fine large pines; to the west, an open field five or six acres in extent.

I reached these woods about six o'clock, and found at least one hundred Robins in or near them, most of the birds being on the ground, in the bushes, or out in the open field, busily feeding. For the next hour only a ^{very} few came in from a distance, probably not a dozen in all. At ten minutes past seven, they began to fly steadily, all coming from the westward, many singly, but the majority in little parties, from three or four to ten or a dozen, flying in ^{loose} order. Upon entering the field most of them lowered their flight, some descending nearly to the ground and skimming it so closely that it was difficult to see them distinctly. Such individuals upon reaching the edge of the woods invariably pitched sharply upwards nearly to the tops of the trees. Others crossed the field on a level with the tree tops; still others

(over)

considerably above them, descending when they reached the grove. They flew rapidly and, for the most part, silently, although occasionally one would utter the low hissing note.

At 7:15 o'clock, I began to count those that crossed the field (which were practically all that came into the woods, as my companion who went to the other side of the grove reported that only an occasional straggler came in from any other direction). I set down the number seen each minute for fifteen minutes and got the following results: 14, 14, 19, 20, 21, 26, 22, 18, 19, 16, 4, 7, 17, 5, 17.

After 7:20 o'clock the flight slackened so considerably that rarely more than four ~~or~~ five birds came in any one minute. By 7:45 o'clock, the flight had practically ceased.

At 7:30 o'clock, I went back into the woods and found that nearly all the Robins in them had collected in a group of tall oaks, perhaps ten or fifteen in number, covering an area about sixty feet across. The tops of these trees were literally alive with Robins which were continuously changing their positions, fluttering noisily among the leaves, and uttering a variety of shrill calls. Evidently each bird was trying ^{to get} a place in the densest possible foliage, regardless of whether such place were occupied or not. But although they often crowded one another out, there were no very serious altercations among them, each as it was dispossessed

(Continued)

1889 (Mass. Cambridge)
July 19 *Merula migratoria* Roost
of its perch merely attempting to dispossess some other bird. By eight o'clock the whole colony had settled down for the night, and all had become quiet in the tree tops. It was nearly dark by this time. Judging by the voices of the different birds, a large number of them were young. Some of the ^{old} birds occasionally sang for a minute or two, loudly and freely, one being heard after it had become quite dark.

There must have been fully five hundred Robins congregated in this roost. The ground and bushes beneath the ^{occupied} trees ~~of the roost~~ were thickly sprinkled with the birds' excrement which, in the dim light, even after it was nearly dark, gleamed like innumerable snow flakes. When the birds were quarreling with each other for choice of position, the tree-tops presented a curious and animated appearance. During this period, the fluttering of the innumerable wings among the foliage made a sound like pattering rain at the beginning of a heavy shower. The pattering of ~~the~~ excrement on the leaves beneath was also almost incessant.

Probably not more than half the Robins in Cambridge have yet begun to spend the night at this roost, for there are still many about my place whose young are not strong enough on the wing to undertake a long flight. These young and their parents, I am satisfied, have not yet joined the roost just mentioned, for I see and hear them late in the evening and at daylight in the early morning.

Merula migratoria

1908. March 12¹ calling in apple tree at 8 P.M. 16¹ calling at 3 P.M. 27² April 29² 30² 11¹ 18¹
 " June 1¹ 2¹ 3¹ 4¹ long shell 6¹ 7¹ 8¹ 17¹ 18¹ 20¹ 21¹ young bird 28¹ 29¹ 30¹
 " July 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ August 27² 28¹ 29¹ September 7¹ 8¹ 11¹ 15¹
 " October 22¹ 23¹ 24¹ 25¹ 26¹ November 2¹ calling at dinner just as in early spring 3¹ eating Hawthorn berries 5¹ eating Barberry leaves
 " November 1¹ 2¹ 3¹ calling in jungle at dinner just as in early spring
 1909. April 8¹ (par. albino) 9¹ 10¹ (par. albino) 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " (May) 27¹ 28¹ 29¹ June 25¹ 26¹ 27¹ 28¹ 29¹ 30¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " July 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 1910. March 25¹ 26¹ 27¹ 28¹ 29¹ 30¹ 31¹ 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
April 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
May 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
June 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
July 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
August 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
September 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
October 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
November 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 1911. January 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
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 " August 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 1912. March 30¹ in Catalpa by Museum giving Campylobacter 7.30 a.m. April 10¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " May 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " July 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
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 " August 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " " 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " September 23¹ 30¹, October 8¹
 1913. March 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹ 31¹ April 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " May 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " July 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " August 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " September 23¹ 30¹, October 8¹
 1914. March 27¹ 28¹ 29¹ 30¹ April 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " May 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹ June 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " July 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " August 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " September 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " October 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹
 " November 1¹ 2¹ 3¹ 4¹ 5¹ 6¹ 7¹ 8¹ 9¹ 10¹ 11¹ 12¹ 13¹ 14¹ 15¹ 16¹ 17¹ 18¹ 19¹ 20¹ 21¹ 22¹ 23¹ 24¹ 25¹ 26¹ 27¹ 28¹ 29¹ 30¹

Merula migratoria.

1889

April

Cambridge.

Habits in
April

April is the month when the Robin is most conspicuous and attractive in the thickly-titled parts of Cambridge. By the first of the month in early seasons - always before the middle, however late the spring - the migratory flocks have all arrived from the South and scattered over their breeding grounds. The birds quickly lay aside that shy aloofness that characterizes the species in autumn and winter and become at once ~~among~~ the most familiar and confiding of our city birds. Upon their first arrival - often in March when the ground is still frozen and the grass still withered and lifeless - they resort to the lawns more or less but as soon as the grass begins to grow green they feed almost wholly in this way. It is a common and always pleasing sight to see half a dozen or more scattered about one acre or two of green turf the paired birds keeping within a few yards of each other, the male usually leading, as they browse the ground in different directions by short rapid runs, wing now and then pausing to pull ^{How fat & plump they look! How finely they bristled breasts} an earth worm from its burrow. ^{Practically the} entire day is spent at this season on the lawns, ^{contrast against the emerald green turf} if men are at work transplanting shrubs or digging for flower beds several Robins attend them closely and following their footsteps pick up the earthworms that they have dislodged or turned up. A Robin will often come within eight or ten steps of a man at such times. They have no fear of houses and will frequently run directly under a window where people are sitting. At this season (up to May 1st) they sing little except at day break and again at evening after the sun has set and the twilight is deepening fast. They do not, as in summer, sing through midday on rainy days. Yesterday (Apr. 25) during a warm rain I did not hear one.

Merula migratoria

Eastern Massachusetts.

1889 Mass.

- May 8 Cambridge. Nests with full sets of eggs reported nearly a week ago. Most, if not all, of the ♀♀ probably incubating now as I rarely see them with their mates. The ♂♂ still spend much of the day on the lawns hunting earthworms. During the past week I have heard but few sing except at day break although the weather has been warm, clear & still most of the time. Is it usual for them to omit the evening singing at this period? Nesting Science of ♂♂.
- " 10 I saw some broken shells of Robin's eggs under the nest in the Fresh Pond Swamp, a common sight at this season. These early nests suffer severely. Several Crows were breaking through the trees near the spot & probably were the robbers. Broken eggs on ground. Crows robbing nests.
- " 11 One at work repairing an old nest in fork of pear tree in my garden. She took wet, muddy loam from a flower bed where a hose was playing and after plastering several bills full on the inside of the nest settled her body in the cavity and turned slowly around to press it smoothly in place. The nest was originally built in late May 1888. It contained three eggs about June 4th of that year but they were hatched and the shells thrown out by Eng. Sparrows and the nest, after this calamity, abandoned. Repairing an old nest
- " 13 The Robins have apparently stopped work on the old nest in the pear tree for an Irish was tearing it in pieces this morning.
- " 22 Awoke this morning in time to hear the Robins sing. It was just beginning to get light when one called leep, leep-leep a few times then burst into song. Another at once chimed in, then still others until the whole neighborhood rang. They sang almost uninterrupted for 15 to 20 minutes after which I did not hear one. During the past week I have heard very few during the day and there has been no regular or general singing at evening for three weeks or more. Daylight singing Cessation of evening singing

A Robin sings with as little visible effort as any bird I know. His throat hardly swells or quivers perceptibly. He stands in an easy attitude and the song seems to drop from his bill. (See p. 13)

Merula migratoria

1889 Mass.

May 24 Cambridge. - Early this morning I heard young Squawking Young out in the Linden in front of my window. As I am very sure that they do not utter this sound (a loud, abrupt Squawk of one syllable sometimes with one or two syllables added at the end) until out of the nest it seems fair to assume that these birds had really taken to wing already.

" 25 An old bird, apparently a ♂, collecting food for its young on our lawn. It seemed to be taking single worms of very small size having a bunch ^{of them} as large as a cherry in its bill but still adding to the number food for its young.

June 4 Several in full song at daybreak & again in the evening still bringing twilight.

" 8 Robins still in full song, at all hours of the day in dark rainy weather " "

" 10 Two Robins in full song, at sunset, in our garden. I do not hear them often in the mid-day hours now. The song of this Thrush is simple and without much variety but song its tones are pure and strong and it is one of the sweetest restful sounds in Nature expressing faith, hope, courage and above all unconquerable cheerfulness " "

Our garden is now filled with young Robins, the older calls of ours already feeding on cherries. The ^{young} call twice, twice young and utter also a short loud Squawk followed by pte, pte-pte-pte.

July 2 Robins singing vigorously & continuously all over Cambridge, Second the day clear and hot. Their songs seem to me finer singing than in April the tone peculiarly rich and full.

This evening a fairly large flight passed over my garden towards the roost in Norton's woods. This is First flight to roost. This is the first evening flight I have seen this season but I have been away from Cambridge since June 24th. Copy 18

Merula migratoria

1889 Mass

July 7 Cambridge. Many singing vigorously in the swamps this afternoon. I did not hear any much later than sunset when they began to come into the Port Pond swamp from all sides and in some numbers to roost. Singing only in full daylight in midsummer.

" 8 In full song in my garden during most of the day with very general singing throughout the neighborhood at sunset after which I heard only one or two calling. It was interesting to see them dodge the telegraph wires turning sharply upward just before reaching them and lowering their flight again after passing safely over. Dodging telegraph wires Singing only by day

I am now convinced that during its second ^{or midsummer} singing period the Robin does not sing much if at all in the evening twilight. A large flight passed over our place flight to roost to-night in the direction of the roost at Norton's woods.

I have just mentioned the second or midsummer period of singing. This is usually made prominent by a hiatus of a week or two in late June when the Robin does not sing, practically, at all. During the past season, however, there has been no such hiatus although singing declined somewhat towards the last of June and increased again in early July. The prevalence of rainy or cloudy weather during the last two weeks of June doubtless accounts for the exception. First & second song periods connected this year.

" 11 Robins singing all day and well into the evening twilight. Sing late into twilight. Weather cloudy with drizzling rain. This exception does not necessarily disprove the rule given under July 8 (above).

" 16 Singing declining fast, song getting listless & short. Heard them at intervals through the day but none after sunset. Decline of singing
At Falmouth (Mass.) there was a full chorus at daylight on the 15th morning cloudy & raining.

Merula migratoria

1889 Mass.

July 19 Cambridge. - Roost of about 500 birds in Norton's woods (see special notes on other sheets)

- " 22 Falmouth. - A full chorus this morning at daybreak, half a dozen or more singing vigorously near the house for fifteen or twenty minutes. Morning clear & warm. he fell
very at
daybreak
- " 23 Cambridge - Awoke this morning at daybreak. No Robins singing morning clear & warm. (None heard during the day, either.) No singing
at daybreak
- " 26 " No Robins heard singing in or near my garden since the 20th. At daybreak this morning, however, they were in really full chorus at Canton and sang for fully 15 or 20 minutes. None were heard by me there the evening before although I listened for them from a little before sunset until nearly dark. Nor did any sing this morning after sunrise. From the observations made during the past week I infer: (1) That as the second song period nears its close the birds drop their evening singing first, next their diurnal singing and last of all their daybreak hymn. (2) That the close of this second song period is irregular in different places even in town only a few miles apart, or (3) That the singing lasts later into the summer in the country than in the city suburbs.
- " 30 Not a single Robin heard singing in Cambridge since the 19th although I have seen a few about my garden, daily. I think all of them now go to the Norton roost at evening. Singing at
and in
Cambridge
& Falmouth
+ Falmouth
+ Falmouth
At Falmouth I heard none the mornings of the 28th & 29th. Late this afternoon (6 P.M., raining at the time) a Robin sang in low, feeble tones in the garden.

Merula migratoria

1889 Mass.

- Aug. 1 Canton & Cambridge. A full chorus this morning for at least half singing
an hour after daylight, the birds singing
thoroughly & continuously. Late in the afternoon
heard at least three different birds in Cambridge
the latter all regularly sang only two notes at a time
then after a pause of a second or two repeated
the same notes, continuing this for several
minutes at a time the effect very monotonous
- " 2 Cambridge. Robins singing at frequent intervals through In full song
the day and vigorously & continuously at again
times especially later in the afternoon. The
weather clear & warm & vigorous
- " 5 Very general, ~~and~~ well sustained, singing all over vigorous song
Cambridge lasting well into the evening twilight. As
it was getting dark, however, I saw birds after
birds mount into the air & start off towards
Boston's woods.
- " 7. Well sustained & vigorous singing both yesterday & to-day. singing
This morning found a young bird not half grown & Young just
unable to fly on the grass where the old birds were from nest
feeding it. ~~One~~ One of the parents discovered a cat
lurking in some woods and flushing one it called
pipp incessantly until I drove it away. Is this young
bird one of a third brood? Probably not.
- " 8 Robins singing at frequent intervals as continuously &
vigorously as in June, especially between 3 & 5 P.M.
Weather clear and cool. vigorous song
- " 11 Singing slackening a little during the past two days. Several
males in good song this afternoon, however, and one singing
very vigorously at daybreak this morning.
- " 27 Not one heard singing since the 14th when a 3 sang in fields then. Cessation of
singing 17

Mareca migratoria

1890 Mass.

- June 2 Cambridge. - First young on wing to-day, large birds with well grown wings & tails at least a week from the nest. Young out
- " 16 " Several feeding on down early cherries in my garden. At sunset a few flying over in the direction of the Norton's woods roost. Eating cherries
First roost flight.
- " 20 Fifteen or twenty at a time in my cherry tree, most of them young birds. At evening an unmistakable flight towards Norton's woods. Have heard little singing the last few days. Flight to roost.
- " 15 Swanepoeth. - Found two or three birds on Ram and Lukins' Id. both small, trunks islands on $\frac{1}{2}$ mile with the other 200 yds. off shore. Jeffries thinks they go there from the mainland to feed. He also saw several running about on the wet sand at low tide on Phillips' Beach. On trunks islands & wet sea beach.
- Aug. 13 Cambridge. - The Robins have been severely silent since my return to Cambridge (Aug. 11). In fact I have not heard any singing whatever although the weather has been cool and pleasant. There are only few about the place & then all old birds. I see them going over in small numbers at evening towards the Norton roost. Unusual silence.
- " 25 Falmouth. - Passing the W. Falmouth marshes in the cars I saw fully 200 Robins rise and fly off in a great thrapping flock. Mr. Phomme tells me that he saw a number of large flocks yesterday in Falmouth. ^{thus so full each.} Are these migrating birds? Faxon thinks he saw migrating flocks at Migration?
- Sept. 2 As our train passed W. Falmouth at about 7.40 this morning a flock of at least 500 Robins rose from the salt marshes and made off all together towards the W. I think they must have been migrants or else they find some peculiarly attractive food on these marshes (salt) at this season. They rose nearly together as the train approached & from a total area of not more than 2 acres. Large flock on salt marsh.

5-35

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Merula migratoria

1890 Mass.

Sept. 2 Cambridge. During the last two weeks of Aug. Robins were so scarce about our place that I rarely saw more than 2 or 3 there in a single day but at evening there was always a fairly large flight passing over in the direction of the Norton roost. On my return from Falmouth (where I spent the 31st Aug & 1st Sept) to-day I found fully 30 birds in the garden feeding on elder berries and rum cherries. Their excrement, stained by the juice of these fruits, was everywhere inkly or purplish black. When they are feeding on apple worms it is always white with a dark spot in the centre like the Woodcock's & Quip's. This evening I drove slowly from Waverley to Cambridge while the roosting flights were on their way. Saw flocks, some of them very large, all the way from Waverley village to Mt. Auburn every bird heading directly for the Beaver Brook roost. Two large flocks left the orchards on the Coolidge farm and a third the maples at Mt. Auburn gate. No Robins seen between Mt. Auburn & my house.

- " 3 At least 30 birds in my garden to-day eating cherries & elder berries. I think they are also attacking my grapes. At sunset the sun high in air & started straight for the Beaver Brook roost. Within the next fifteen minutes fully 100 birds followed them, the greater part in two flocks all very high (300 to 500 ft) and all appearing from the direction of the Norton roost. After they had all passed I saw four birds (a single & 3 together) flying low towards the Norton roost. The August flight towards Norton's has never been less than 30 or 40 birds each evening. What means this change? Is the Beaver Brook roost drawing all our birds now by sending recruiting agents to mingle with them during the day? I am very

Continued

Merula migratoria

1890 Mass.

(Sept 3 Cambridge) Here there only four birds passed within sight of my place towards the Norton roost for I watched the sky during the entire flight period & saw no others. It certainly looks as if the area tributary to the Crane Brook roost was spreading and draining much of Cambridge. Perhaps the faithful four just mentioned were solitary or scattered birds that missed the main flight westward and repaired to their old haunt. They passed fifteen minutes or more after the Crane Brook flight ceased.

" 4 Norton roost. Faxon and I standing back to back in the middle of the field behind the Divinity Library counted 1251 birds between 6.05 and 6.35. Flight wholly over at latter time. Well under way but not heavy when we began counting. Buell passed in between 6.15 and 6.25. About 200 birds in the woods where we arrived. They came in large flocks & flew low. Sounding clear but hoarse. Heard a little singing apparently by young birds. Most of the flight came from the W. but a good many from S. W.

Boys Count
at the
Norton Roost

On entering the wood after the birds were all in we found the roost spread over much more ground than usual. Many birds were in low trees & tall bushes. We startled a number of them when a general panic moved a hundred or more birds leaving the roost & crossing the ball field, only a few returning. We could not tell if any birds came in on E. & S. sides. They passed us in such numbers at times that we could not get them all down. Probably there were 1500 birds in the roost this evening.

Merula migratoria

1890 Mass.

Sept 6 Cambridge This evening the flight over my garden was wholly in the direction of the Norton roost. I did not see a single bird going in any other direction. Mr. Moody whom I sent to the Norton roost on the evening of Sept. 3, when the flight over my garden was directed westward, reports that Robins were entering the roost in large numbers when he arrived on the ground. He counted 215 birds in ten minutes. All came in from the N. W. ^{to N.} few or none from from the direction of my garden (W.).

" 7 When the Robins finished the run cherries, which they did very speedily, they turned their attention to my grapes. For several days past they have been almost constantly in the arbor, eight or ten of them at a time. They select the ripest grapes in the bunch and puncturing the skin eat the semi-liquid, backharrow matter between the skin and the pulp. In a few cases I have found the whole or part of the pulp eaten, also. The grape attacked is never removed from the stem but remains in the bunch, usually shrivelling up after a day or two. Thus far the birds have punctured only the Concord grape but no other variety is as yet ripe here. They have destroyed fully one half of ~~the~~ that have ripened thus far and there is scarcely a bunch on my vines that has not suffered to the extent of at least one or two grapes. I make the birds welcome to them all, however.

Merula migratoria

1890 Mass.

- Sept. 11 Cambridge. - Since the 6th the Robin flights Another
flight to
the W. over my garden each evening have been wholly in the direction of the Norton coast until to-night when every bird that I saw flew westward presumably to the Beaver Brook coast. In all only about twenty were noted but I was not on the watch during the whole of flight time. They went over in small flocks and singly. Twice I saw one or two of the tail birds in the flock turn back and fly a little way in the direction of the Norton coast, then turn again and follow the main body westward. Were not these undivided birds some that usually resort to the Norton coast? The evening was cloudy threatening rain & all the birds flew low.
- " 12 At 8 A.M. Robins began coming into and passing over our garden in flocks of a dozen or more. In the course of an hour I saw fully 100. All came from the W. and doubtless from the Beaver Brook coast. They are still feeding chiefly on rum cherries. Do not touch the grapes now. This morning was cloudy and foggy.
- In the afternoon my garden was invaded by one of Food the large flocks which are now roving about. At one time there must have been 30 or 40 scattered everywhere many running about on the lawns apparently looking for earthworms but the majority in the trees or among the grape vines. I saw several attack bunches of ripe grapes picking at them foscally and many times in rapid succession. Others collected

Continued

Merula migratoria

1890 Mass.

(Sept 12 Cambridge) about my asparagus bed taking a good Food many of the berries by jumping up at them from the ground beneath. A good many also assembled in a red cedar the berries of which were eaten freely. I saw one bird peck several times at a green plum which lay on the ground under the tree. Failing to make much impression on it it finally divided it in its bill and flew with it to the top of the hinder tree.

I was unable to watch the roosting flight Roosting this evening but saw one flock starting for Flight the Beaver Brook brook.

Dec. 22 Belmont, Waltham, & Melrose Highlands. - Mr. Foxon Wintering tells me that he has found Robins in large flocks at various places in his range since early in December and that Mr. Forey reports them numerous about Melrose Highlands. The month has been cold with a good deal of snow. Birds feeding chiefly on privet berries. Cedar berries scarce this year.

1891

March 23 Cambridge. - During January, February, and early March Wintering Robins have been numerous in Belmont, Arlington, and several other towns near Boston going in large flocks and feeding chiefly on privet berries. I have seen none in Cambridge until this evening a little after sunset when one appeared in my garden perching on the top of a cherry tree and calling First arrived (pip) loudly and cheerily many times. It then from South flew down into some low pear trees. Its behavior, manner of calling, etc., satisfied me that it was one of our local birds just arrived from the South. A warm rain falling at time.

Mercula migratoria

1891 Mass.

March 27 Mass Cambridge -- Bolles tells me that Robins appeared about his house on the 23rd. On the morning of the 25th he saw three or four and heard one in full song at day break. I have seen none in my garden since the 23rd and feel very sure that ^{therefore} there has been no morning or evening singing within hearing of my house. It is beyond question, however, that a small number of our ~~breeding~~ birds have already arrived and settled in their summer haunts. During a drive this morning I saw them in several places, behind Mr. Auburn, back of Fresh Pond, on the Payson place, near the old Faxon house, - all single birds perched on trees near houses or flitting about in orchards, calling, and evidently feeling quite at home.

Arrival of
our summer
birds.

" 30 Robins spreading over the country and increasing gradually. I have seen them on my place for the past two days but have heard no singing yet. They call a good deal, however, and are familiar and confident. Faxon heard several in full song at Lexington last evening but says that singing has not as yet become general.

April 8 Five or six singing and calling on my place this evening. Singing mostly of the wherry type. This is the first time I have seen more than two or three about the house this season. There was a heavy flight inland (Waltham, Lincoln & Concord) on the 5th and an increase in Cambridge on the 6th. The quota is nearly full to-night I should say.

" 21 Cambridge. Saw a bird at work on its nest which appeared nearly finished. It carried something into it and then settling itself as if sitting turned slowly round & round to shape it. The hour was 8.20 A.M.

Nest building

Massachusetts.

Merula migratoria. (no. 1)

1891.

Oct. 24 Lawlisle. We were much interested in watching a number of Robins which were feeding on the berries of the ground juniper. Although there were dozens of these shrubs all around us the birds visited only one, clustering all over it, a dozen or more at once. There was one superb old male among them. I shot at him at long range but missed. On examining the bush I found it loaded with berries, whereas there were ~~but~~ few on any of the others.

1892.

April 2 Amherst. Robins do not seem to have increased in numbers during the past week nor have they fairly begun to sing yet. Indeed I have thus far heard but two in full song. Nevertheless they are well scattered about the orchards and gardens and their calling to one another at evening and early morning is a pleasant sound.

April 13. There has been little singing by the Robins for the past week.

April 21. When I started for home at 5 P.M. it was raining steadily and the wind had nearly all died away. It was typical Robin weather and I think every male Robin in the country was singing at his best. A bird on Holden's Hill is a particularly fine singer. He imitates the call-note of the Quail perfectly.

May 31 A Robin singing at the western end of Ball's Hill this morning interpolated in its song at rather long, irregular intervals, a succession of rather

Massachusetts.

Merula migratoria, (no. 2)

1892.

- May 31 Sharp yet woody notes which reminded me of the peculiar challenge of the Wood Thrush. In fact I supposed at first that there really was a Wood Thrush in the trees calling in low tones.
- June 6. The day (May 9) after the fire I found a Robin's nest at Ball's Hills in a young pine which stood just outside the border of the burned tract. On that date it contained two eggs which must have been fresh as a third was laid the next morning. This morning the young were out of the nest flying about among the neighboring trees. Their parents very anxious and fussy about them. I did not actually look in the nest yesterday but I passed it twice and the old birds which were near it made no outcry. Hence I believe that the young left it this morning.
- June 17 The young Robins in a nest behind the hill have also left the nest since the 15th when I found the old bird brooding them.
- June 20. A Robin has a nest near the extremity of a small branch of a young oak not 20 ft. from my door. I first saw it the 15th when it appeared to be finished. The bird was sitting on the 16th & 17th & again today. She flew off every time the door was opened or any one appeared within sight in any direction. On the 17th we must have disturbed her 20 times at least. She always returned to the nest the moment the danger disappeared. This

Massachusetts,

Merula migratoria. (no. 3)

1892.

June 20. Bird is doubtless the same individual who had a nest in a small pine on the north side of the hill and whose first brood of young took wing June. My reasons for thinking this are that the whole family moved around to the leafy oaks near my cabin where they have since remained. I have not seen the young, however, for several days. The old male was singing near the cabin on the evening of the 17th just after the shower but I have not heard him since. I suppose he is taking care of the young. I examined the nest late this afternoon & found that it contained three eggs, the same number which composed the first set.

July 7 At Ball's Hill I examined the Robin's nest by my cabin door and found that it held young about half grown but without feathers.

Merula migratoria.

1892. Mass.

July 14. Concord.- For more than a week Robins have sung most freely Robin's
(No.4) during the day time-especially in the afternoon-and sparingly- not
or not at all- in the early morning and after sunset. I do not roosting
as yet see any indications of a roost in this neighborhood. yet.
There were no Robins flying in the birch swamp on the Assabet
last evening and I have seen none passing over any of the places
where I have been at sunset of late. In fact I am quite certain
that the birds of this neighborhood are still roosting singly
in the trees near their nests. They come in great numbers every
day to a cherry tree behind the house. Some of them take the
cherries off in their bills, perhaps to distant nests with young
others swallow them whole although they (the cherries) are of a
large size.

(No.6) Concord.- The Robin's nest near my cabin was empty but the old Young
birds came about and scolded me so I concluded that the young of Robins
this their second brood had been safely reared. (I saw the young of
next day, bobtails, feeble on the wing.) second
brood
leave
nest.

Merula migratoria.

1892. Mass.

July 27. Concord.- I saw Robins in small flocks in my blueberry swamp Robins
(No.3) and among the maples at the foot of Holden's Hill. At the
latter place they seemed to be collecting to roost (a little
before sunset.)

Aug.17. Concord.- Robins too were coming in from various directions and Robin
(No.2) pitching down into the maple woods on the eastern borders of the roost
meadow. Their roost, however, is of trifling proportions judging
from what I saw of it this evening.

Aug. ²¹~~22~~ Concord.- The Robins, six or eight in number came, apparently, Curious-
(No.4) from a distance and singly and pitched into the birch swamp ex- ly small
actly at the point where there was a well-defined but small Robin
roost in 1886-87. There can be no doubt that those that came roost.
this evening passed the night in those trees for I stayed near
them until it was nearly dark and heard them flutter and settle
themselves on their perches. Surely this is the smallest Robin
roost on record?

Merula migratoria.

Cambridge, Mass.
March, 17-1893.

There were two Robins near the entrance to the lane, one eating buckthorn berries, the other sitting in the top of an apple. Both birds uttered the laughing ha-ha-ha, the pep, and the leop at frequent intervals and one looked like a female. Altogether they impressed me as being a pair of our local summer birds. Hoffmann thinks that ~~there was~~ a small flight of our local Robins arrived on the 11th inst. when he saw a flock of six, containing two or three females, at Pond Pond which is not a winter haunt. The flocks of Robins seen here in winter are usually, if not always composed wholly of males, according to Tappin's observations.

Robins

East Watertown, Mass.
March, 20-1893.

Near the old Toolidge homestead. A Robin was singing but in broken, disconnected phrases. Another was running about on a grass of barn turf on the Lowell place and still another calling in Mr. Auburn. They must have been our local summer birds. (A ♂ in elm in my garden in P.M.)

Robins

Concord, Mass.

1895.

April 2
(No 3)

Two Robins were singing freely near Ball's Hill this morning, a little before sunrise, one to the westward the other on the Belford shore. Just before sunset another paid me a visit at the cabin hopping fearlessly about on the path within ten yards of the door pecking up and eating several small worms. I am very sure that this was the bird that nested in the oak near the cabin last summer. No other Robins besides these three were seen to-day.

Robins

Merula migratoria (2)

Concord, Mass.

1893

April 4
(No 2)

There was a marked increase in the number of Robins to-day but within they are scarce here this Spring or else the summer birds have ~~not~~ ^{not} all arrived as yet. There was very general singing when the sun came out this afternoon but only general calling this evening although the air was mild & still.

Robins

1893

April 7
(No 2)

The young man who came to see me last evening counted 37 Robins on this trip to and from Farnham yesterday. This morning they were in great abundance about our house. I saw five, apparently all males, squabbling together in the top of an apple tree, making a squeaking noise very like that of a Robin in the clutches of a Hawk. During the hard storm in the afternoon several birds visited the little forest vine on the shed to feed on the berries. It is evident that the bulk of the Robins did not reach here this Spring until yesterday or the day before. Our summer birds have now probably all come and with them perhaps some migrants bound still further north.

Concord, Mass.

Concord, Mass.
April, 8, 1893.

Robins were, I think, more numerous to-day. I counted 71 between the Pondfields & Ball's Hill. Most of them were running about on the ground near the edge of the orchard where the plow had matted. It is probable that this earlier mowing of the snow on the river bank had attracted them from fields elsewhere. We have now a good ground until later in the day.

Robins

Merula migratoria. (no. 3.)

Concord, Mass.
April 9. 1893.

Sometime after sunset - indeed it was nearly dark at the time - we saw several Robins cross the river from the Bedford shore and pass around the E. end of Ball's Hill flying very low and swiftly. Following them we found a number assembled in a cluster of young bushy white pines where they were evidently settling themselves for the night, calling to one another and fluttering just as they do in autumn. Just how many there were it was impossible to ascertain but we saw and heard at least six or eight. They had all become silent before we left the place.

Spring
Robin seen

Cambridge, Mass.
April 9-1893

Robins appear to be very numerous this spring in Cambridge. They were singing in the garden, at intervals, during the earlier day and at various other places and generally. I saw four in one tree at the house.

Robins

1893
April 17
(no. 3)

Concord, Mass.
April 29. 1893.

A Robin singing steadily in a wire maple at 9:11 sat crooked low on branch its head turned to the side as if it were frightened or listening. I watched it for several minutes during which it did not change its position perceptibly. A female Robin in another place was collecting dry grass for its nest & already had in its bill a bunch much larger than its head.

Concord, Mass.
Thurs.
April
1893

Merula migratoria

1893 Mass.

Jan'y & Feb

"Shooting & Fishing" (for Feb. 2, 1893, p. 302) records the appearance Winter mig
a flock of 53 Robins ~~between~~ ^{between} Hingham and Plymouth, Mass. from the South.
on Jan. 10. On Jan. 28 Harry Gurnough saw several birds
in Longwood and Bolles a flock of about 50 near Fresh Pond.
On the 29th I saw about 25 near Fresh Pond and Bolles heard
one or more in Arlington. These facts seem to indicate
that there has been a considerable flight and that
it has come from the South.

December ~~Walden~~ and Arlington. Through this month Robins
were seen at short intervals in Arlington, the
last (a single bird) on the 31st. Up to the 20th.
I saw a small flock whenever I drove past the
cedar grove near Arsenal Brook on the Coolidge farm.
At first there were six birds but one by one they
dropped out until only two were left. I went
past these places many times in January and
February but saw no Robins there although
plenty of berries remained ^{some of} on the trees.

Feb. 13 Arlington - A large flock seen to-day by those young ^{the winter}
friends of Hoffmann's in "Men Orchard", where ^{the} Robins ^{flown} ~~spent~~ ^{spent} last December. ^{flown} ~~Those~~ ^{Those} previous to this, date I
have heard of none seen about Cambridge or Arlington
since December 31st

- " 14 Cambridge. Flock of 15 to 20 seen by Hoffmann in Botanic
Garden feeding on buckthorn berries.
" 15 Two in our garden this morning eating snow.

Merula migratoria

1894. Mass.

May 28 Concord. As I was paddling up Concord River at about 4.30 P.M. I heard a Robin singing steadily in an open pasture just below the Y-tree. Presently I saw the bird. It was standing in the usual position on the close-cropped turf - not on a mound or the highest perceptible elevation but simply on the flat, level surface of the ground. It kept on singing as long as I was within hearing. I do not remember to have ever before seen a Robin sing on the ground.

Singing on the ground

July 20 Cambridge. One the afternoon of the 18th a Crow came to the birdhouse and immediately afterwards there was a great outcry from some Robins which were nesting there. The gardener ran around the house and found the Crow on the lawn pecking at a young Robin which it held in its bill and took up into the trees when the man approached. A few minutes later the gardener again went to the birdhouse and returned with a Robin which he saw drop from near the top of one of the trees where the nest was placed. The bird was barely half grown, but beautifully feathered, & quite unable to fly. At first we supposed that it was the one which the Crow had killed but it showed no marks of external injury & soon recovered from the shock of the fall. I put it in a deep box open at the top & wedged the box in a fork of the tree. The old birds fed it at short intervals giving it both worms & cherries. It flew from the box this evening at dusk going off quite strongly & appearing to be fully fledged & grown.

Crow kills a young Robin from nest.

Old Robin fed young

Merula migratoria

1891 Mass.

January Belmont & Arlington. "Robins have been plenty all this month. Heard them sing on the 13th, 17th and 27th XXX. On the 22nd I saw two or three females among a flock of 22 in Arlington." (W. Foxon's January 1891 notes in letter Feb. 2, 1891)

Females in a winter flock.

1897

March 22 Cambridge. A general arrival of our local birds to day. I saw them in pairs or singly in many places in Belmont this morning & in the late afternoon they were generally distributed in Cambridge. At sunset a bird in the old oaks just below the reservoir was in full song for several minutes. The first Robin was seen in Cambridge by Northbridge on March 13th. One flock or least passed the entire winter on Arlington Heights.

Gen. arrival

1898

Mar. 15 Concord. Found Robins close about the [Keyes'] house. [Journ.]

Mar. 16 Concord. Singing at sunrise near the [Keyes'] house. [Journ.] N.H.

June 14-15 Needham. Heard several singing in the village at evening. [Journ.] Mass.

June 16 Andover. Singing in the village in the evening. [Journ.]

June 26 Concord. With the past few days I have seen Robins feeding greedily on green caterpillars. [Journ.]

Mass., Berkshire Co.

July 2-4 Glendale (or near). I noted them in abundance. [Journ.]

Merula migratoria.

Concord, Mass.

1894. Robins have frequented the river banks in small flocks
Oct. 11. through the latter half of October to feed upon the black al-
to
Nov. 21. der berries and I found a single bird on the 24th November.
On Nov. 4th I saw several flocks of Robins in the cedar pas-
tures along the Estabrook road. Apparently only a few strag-
glers remained in the region about Concord after Nov. 15th.

Uniformly clear, warm weather through October.

Merula migratoria.

1895

Mass.

April 12

Cambridge. Robins have arrived within the past three or four days in full force and was singing at early morning & late evening but not as yet during the daytime. At this season as well as later they indulge in a singular performance. I saw two of them at it this evening. They were running about on the turf a yard or two apart manœuvring as if for position. One of them sang incessantly but in such very low tones that none of the notes were audible at a distance greater than fifteen or twenty yards. It was, indeed, a whispered rendering of the usual song interspersed with low wheezy or hissing notes. After they had run over several spaces of ground, they suddenly came squarely together and ^{like fighting cocks} sprang directly upward a two or three feet pecking at each other furiously & making a loud fluttering. A few moments later they rose in the same manner to a height of nearly forty feet coming down straight & very slowly, their wings making a hard, dry sound like the rustle of stiff cloth shaken vigorously. As nearly as I could make out both birds were males. These encounters are not uncommon in early spring. They appear to be invariably bloodless & I have never ever seen the bird lose so much as a single feather.

a curious
mode of
fighting

Aug. 26

A little before sunset I was astonished to see a Robin engaged in catching flying ^{upper branches} insects. He made his sallies from the ^{top} of a leafy elm in our garden flying straight out into an open space for a distance of 8 or 10 yards & after securing his prey turning sharply about & returning to the tree, but always to a different branch from that whence he had started. Some of his flights were directed upward at an angle of about 45° others were nearly horizontal. His aim was so accurate that I do not think he missed once nor did he once dash & retire in pursuit of his bug as the Cuckoo does so often do. It was always the straight flight out & the sharp turn back, nevertheless his flight was characterized by a clumsy exaggerated business to see. He did not pick on the tips of the branches but among their leaves whence he started with much noise & awkward fluttering. After making two or three flights in quick succession he invariably hopped & flitted through the branches into the middle of the tree where he fed a young Robin that was here large enough to fly. I have never seen nor heard of a Robin catching flying insects before. I could not make out the ^{kind} of this bird probably but it looked like a weevil.

Catches
flying insects
& feeds young
with them.

Murela migratoria

1895. Mass.

Sept. 1 Canton. "A" nest containing four half-grown young" found
By J. H. Bowles (G. Litch J. H. B. Oct. 10, 1885)

Later nesting

1896

April 30 Cambridge. Returning from a stay of a month at Concord I find a partial albus Robin in our garden. It has a ^{wholly white} ~~large white~~ ^{tertiary in the right wing and a tuft of white scapulars just above the shoulder of left wing,} ~~white feathers on each wing, apparently among the feathers of the alula.~~
It looks like a female.

Partial albus

May 7 The albus still here & evidently established for the season. Strangely to say it seems to be unmolested. At least I have never seen another bird with it.

(This bird disappeared about May 15th & was not again seen. Possibly a cat caught it but I think it more probable that the bird left the locality.)

Sept. Oct. Cambridge. Early in September the gardener (Michael Mallory) wrote me that a nearly white Robin had appeared in the garden. It was seen there daily for the next two or three weeks. When I reached home on October 5th it had not been seen for eight or ten days but on the 6th Walter Dean saw it on Highland St. and I found it in our garden on the morning of the 7th & again on the 8th both times in company with a Robin of normal coloring. The albus was a beautiful bird showing white all over excepting on one side of the breast where there was a patch of red & on the head, hind neck & scapulars which were sparsely streaked or spotted with dusky. There were also a few dark feathers in the wings. The bird looked unusually large, owing, no doubt, to its light color. It was very tame. Michael says that when it first appeared here it was evidently a young bird just from the nest. He thinks it was reared in the garden.

a fine
albus
in our
garden.

Merula migratoria

1936. Penobscot Bay, Maine.

Deer Island. June 20¹² 21⁴ 22⁴ 23⁶ 24⁴ 25⁴ 27¹

July 1⁴ 4⁴ 5³ 6¹ 7¹ 8⁴ 9² 10² 11² 12¹ 13² 14² 17² 18²

Grog Island Jan 23 ^{2 odd nests} no birds

July 8 Isle au Haut. Several in Spina pastures, one singing

" 9 Marshall Island. Two in pasture.

" 14 Sedgewick. Common everywhere

" 15 Bowdoin

June 16-22 Matineus Island. Common. Field H. H. Job.

June 22 Robins, Swainson's Thrushes & a Hermit singing together this evening. The Hermit sang for about a minute after the last Swainson's had ceased. A Robin sang for fully five minutes later than the Hermit & other Robins called still later!

" 23 Deer Island. 1.

Merula migratoria.

Ball's Hill, Concord, Mass.

1897. A year or two ago I noticed what seemed to be a small
April. spring Robin roost in some dense young pines on the N.E. side
of Ball's Hill. This season I have seen the birds there on
only one occasion, viz. April 26th when between sunset and
dark a dozen or more came in from different directions but
chiefly from the S. and S.W. I think they were all males for
nearly if not quite every one sang for a few minutes just be-
fore dark making a fine chorus. A strong and exceedingly
chilly S.W. wind was blowing this evening and they doubtless
sought shelter from it among these pines under the lee of the
high ridge. Robins have been scarcer than usual at Concord
this spring.

General Observations

1839

July 8

about 1000 ^{in districts of Virginia} ^{humilis} ^{at 8:15}
almost all gone except ^{all silent}

July 10

July 10

usually in family parties then often singly or two or three together. At first they began to be noisy but it did not seem to equal about 1/2 hour and then, 8:10 getting out, 8:30 all were out except a few. They began to be noisy, little in part at 8.

Increasingly loud & then they began to fly in the air. Many alighted in field & flew off when it had been over.

They began to fly off low then more of them.

Then they began to fly off low then more of them. They began to fly off low then more of them.

July 10

Darkness.

3 A.M. warm, thin clouds, moon in 2nd quarter. Light a fair day. 8 but 1000 ^{humilis} ^{at 8:15}
At 3:06 a shower so heavy it was hard to see. In thick darkness. Then began to rain. The full moon. At 3:16 heard in trees in dense forest. Beyond these at long then birds left most. In much daylight some that were in woods. At 3:24 to 4:19 more. Was continuous in dense forest. Most were departed. At 4:20 (by the daylight) but about 1000 ^{humilis} ^{at 8:15} in woods. Most were, flying in ground.

None of them were seen to fly. When they finally left they flew low over the ground at first. Many then to feed in the tall field. But a few were seen.

July 24

23% not more than last night. It would seem as if there were considerable daily fluctuations due to some kind of irregularity.

Tyrannus carolinensis (Hirundo)

1989

July 6 Saw 2 birds the beginning of flight over this place began at 6.35 and lasted until 7.15. The birds went in little flocks from 3 to 35. Many flew at a great height, those that came from 200 to 300 taking a direct course and descending at those from the S. 'Tyrannus' seem to follow up to Beaver / Black Valley.

" 11 First bird flew over at 6.20 and 6.35. But at 6.35 a great many were collected in the 'Honey' Big cove, these are probably the birds that had spent day in neighborhood, preparing to dep. for 200 to 300 ft. above the ground. The lower later probably came from a distance.

" 29 Went to count to night. Birds began to arrive by 7.15. The only flight would be to only to come very often taking flights of 100 or less. I noticed a 'Tyrannus' in that I noticed a 'Tyrannus' to make a great fully as many seemed to be in flight. The direction of the birds.

" 31 July 31.3 P. O'Brien to night. The sun set in a dark hour and the birds flew for the most part to a great height many being just discernible. I fancy that half of them were beyond my view. When should they fly high in the air.

Sept 1

" 10 To P.M. went to the P.O. in front of the station on the side towards the station. The birds were in such numbers that it was absolutely impossible to count them. Yet I have counted from the 'pro' on only 358! I went into the edge of the next place in afternoon. saw a wood and red maple oak etc. I found a small swampy stream. The stream was

" 14 Wind to blow in a cloud. Birds flew in many flocks in the air.

1889

Hanson's "Gleaner" Observations

July 15

Mind is the sun set in cloud as fog or haze. The birds all flew low almost all of them budding along shore of the river by Beaver Brook, at the height of 100 ft. above them, the top of the hill where I stood.

" 15

Sunset clear, the birds flew low.

1890

July 15

Went to visit the quarry & loop part. The birds are spotted breasted very much. But among them I detected many adult birds. In considerable numbers.

Oct 4
1889

Robins after the migration, passing in flocks. The birds yet a good many still going to the roost.

Letter of Aug 1 - 1890

1889

Faxon's Counts at Beaver Brook Roost.

July 14

fascia Good many flying in small flocks

Aug 5

140 after 7 P.M.

"

" 6

485-6.35-7.15

"

Sunset 6.57

" 10

390

"

" 11

556 6.25-7.15

"

" 28

1180 6.15-6.45

"

Sunset 6.24 Average 91 birds per minute from 6.30-6.35-170 birds before sunset

" 30

838 5.55-6.35

"

" 6.21 in bank of lake - 390 birds before sunset

" 31

450

"

Sept. 2

1883 5.45-6.35

knoll

two counting.

Sunset 6.16 in haze. Birds flew high. X 5 birds = 9415 about 1100 before sunset.

" 4

538 5.35-6.30

fascia

" 13

84

"

" 14

419

knoll

" 15

84 5.50-6.15

fascia

Sunset 5.53. Evening clear. Only about 3 birds before sunset.

" 16

190

knoll

" 17

53

fascia

" 18

210

"

X Wavering

" 25

109

"

Oct 3

good many

"

" 9

roost

Very few came in

" 20

"

practically deserted.

1890

June 11

about 12

fascia

July 7

18 7.10-7.40

knoll

Sunset 7.23 7 birds before sunset

" 13

42 7.10-7.45

fascia

Sunset 7.20

" 15

"

roost

"already very populous"

" 16

54 7.10-7.45

fascia

Sunset 7.18

" 20

35 7.10-7.40

"

" 21

140 6.35-7.40

knoll

Sunset 7.15 103 birds before sunset

" 26

71 7.00-7.40

fascia

" 30

15 6.45-7.30

"

Sunset 7.06

" 18

420 6.55-7.45

Roost

not ad

1889.

July - Fair's Notes in a Robin Nest above Haverly Mill Road in I
14th Noticed a good many robins, in small flocks. ^{Waltham} after Sun-
down flying over in a NW direction at a considerable height.
'Already roosting'

August -

3^d The robin nest is on Beaver Brook, above the upper mill
pond on Mill St., about 2 1/2 mile from this house (near White &
Beach Sts.). Mr. Brewster tells me that this is an old
locality & that there used to be another so near as one
in the Fresh Pond marshes. One (during the '70s) he
estimated that 2500 birds entered their nest from
one side alone! He says they begin to congregate around
it as July 4. I saw them for the first time this year in
Melrose with 20000 birds, and there is no doubt
that the one in Fresh Pond was a little larger.

5th Counted 140 robins from the piazza before 7 o'clock
flying over to the nest on Beaver Brook.

6th In the evening I took my station on the veranda at
6:30 o'clock and saw, I think, the beginning of the flight of robins
over this place. It began at 6:55 and lasted till 7:15.
The birds went over in little flocks of from 2 to 35. Many
fly at a great height. I saw that apparently from E. to
S.E. take a direct line over Waverly Hill. Those from
the S. (Waltham) seem to follow up the Beaver Brook and

Aug.

by, heading first for the Thayer estate, then swinging
around to the right.

6.35-6.45, 45

6.45-6.50, 89

6.50-7.00, 87

7.00-7.05, 87

Sunset, 6.57

7.05-7.10, 109

7.10-7.15, 38

455

10th. About 390 robins flew over this evening.

11th. Counted 556 robins from the piazza to-night.
The first bird flew over at 6.25, then none till 6.35. Between
6.35 and 6.40 50 birds birds passed; 6.40-6.45, 16; 6.45-6.50,
77; 6.50-6.55, 60; 6.55-7.00, 336; 7.00-7.05, 41; 7.05-7.10, 43
7.15, 1. By 5 o'clock a great many were collected in the
big oaks; then are probably the birds that have spent the
day in the neighborhood, preparing to depart for the
west, while those that fly over the house later proba-
bly come from a distance.

13th-27th. Willoughby Lake, N.Y.

25th. Robin count from the piazza - at times the birds flew
so thick that I failed to get them all down! —

Aug.

6.15, 2

Sunset, 6.24

6.20-6.25, 168

6.25-6.30, 169

6.30-6.35, 456 (91 per minute!)

6.35-6.40, 205

6.40-6.45, 110

6.45-6.50, 70

1150

29th. Went to the robin roost to-night. The birds began to as-
sire by 5.55 o'clock. The early flocks would alight for
only 5 or more every 30 min, taking flight at greater or
less duration & returning again - so that I found it im-
possible to make a count. Fully as many seemed to
come from Longington direction as from Willoughby.
30th. Count of robins from the piazza:-

5.52-6.00, 76

6.00-6.05, 48

6.05-6.10, 40

6.10-6.15, 73

6.15-6.20, 253

6.20-6.25, 229

6.25-6.30, 156

6.30-6.35, 59

6.35-6.40, 24

838

Sunset, 6.21 in back of house.

Aug.

3rd Only one robin tonight. The one I saw sat in a bush of hays and the birds flew for the next faint at a great height - many being just discernible. I fancy that half of them were beyond my view. Why should they fly high in hazy weather?

Sept.

1st Towards six o'clock P.M. went to the robin roost, taking a position on the side towards Mr. Morse's. The birds were in such numbers that it was absolutely impossible to count them. I then counted from the piazza on 358! I went into the edge of the roost-place (an extensive, somewhat weed of grassy plot, etc., etc.) and found a good many Brown Thrashers there.

2nd With the aid of an assistant I counted the robins this afternoon from the rocky knoll between Mr. Morse's and the Cascade (not far from the roost). The count must be taken only as an approximation to the truth.

| | |
|-----------|-----|
| 5.50-5.55 | 8 |
| 5.55-6.00 | 5 |
| 6.00-6.05 | 23 |
| 6.05-6.10 | 405 |
| 6.10-6.15 | 380 |
| 6.15-6.20 | 300 |
| 6.20-6.25 | 200 |
| 6.25-6.30 | 100 |
| 6.30-6.35 | 100 |

Sunset 6.35 in haze
Birds low high

1583

Sept.

1889-

II.

3rd Towards 6 o'clock P.M. I walked entirely around the robin roost. The birds came in from all sides - Belmont, Watertown, Waltham, Deepington, and Arlington. Last night's $1563 \times 5 = 7815$ would probably be far below the true number of birds now sleeping there.

4th Count of robins from the piazza, 538, from 5.35-6.50.
5th-13th. Sprink.

13th. Only 84 robins passed over the place this evening.

14th. Counted the robins from the knoll between Morse's and the Cascade - 419 against 1883 on Sept. 2. They must have been going south during the last 5 days. W. East. Sunset 6.35 in haze. Birds low high. Sprink.

15th. 84 robins, again, passed over the house to-night, as follows: 5.50-5.55, 5; 5.55-6.00, 54; 6.00-6.05, 23; 6.05-6.10, 26; 6.10-6.15, 2. Sunset, 5.53. Haze. The birds flew low.

16th. Counted the robins again from the knoll near the Cascade: 190. Wind W, sun set in cloud, no fog or haze. The birds all flew low, almost all of them scudding along thro' the trees by Beaver Brook, at the height of, or lower than, the top of the knoll where I stood. Owing to this method of flight I undoubtedly missed a good many birds, but it is clear that the roost is on its last legs.

17th From the piazza counted only 53 robins!

18th While on the railroad between Belmont & Waverley 187

Sept.

robins flew over towards the roost between 5.25 & 5.35 P.M.

Saw about 30 more afterwards from the piazza of the house.

19th. On the way down to Waverley from Arlington Heights about six o'clock, P.M. saw a great many robins on their way to Beacon Brook. The roost is not yet deserted by any means. All the robins I have scrutinized to day (it was too dark to determine the ones going to the roost) seemed to be old birds.

20th. A large number of robins among the Waverley Oaks this morning - almost all of them bright-colored adults. Are they birds just come from the north?

21st. Great number of robins in the Forest Park Swamp this morning.

25th. Count of robins from piazza, 109.

27th. Counted 251 robins from the hill near the roost. During the latter part of the time the birds alit in the trees before reaching my station and slunk in thro' the trees, following the brook up, so that I could see only a small part of them.

Oct.

2nd. Robins abundant and generally distributed to-day. I fancy they are migrating, but I see no evidence of diurnal migration. A good many still went over last night on their way to the Beacon Brook roost, which is not yet

Oct.

entirely broken up.

9th. Went to the robin roost 15-might - very few birds came in.

10th. Standing in the open on the hill above the Waverley Hospital this morning I observed great numbers of robins apparently working along in a southerly course, feeding as they went, without taking any long, high flights. Later, on 11th Nov. proceeding towards Willingham Hill, I saw a flock of 8 or 12 coming from the S.E. to join the others. Now do not these do their heavy flight by night and continue their southward course in a desultory fashion thro' the day, feeding as they go, in the manner of warblers and other nocturnal migrants?

12th-14th. Gaylock, Berkshire Co. Only a very few robins seen, on the 15th.

20th. Towards sunset I went to the robin roost and found it practically deserted.

1890

N.S.

June 11. First noticed the Robins flying over the place on their way to roost this evening. Saw about 12.

July 7. Count from the Knoll near the Cascade ($\frac{1}{2}$ mile from roost).
 7.10-7.15, 2; 7.15-7.20, 4; 7.20-7.25, 3; 7.25-7.35, 8; 7.35-7.40, 1; total, 18.
 Sunset, 7.23.

July 13. Count from piazza (1/4 mile from roost): 42 (7.10-7.45, sunset, 7.20).

July 15. Went to the Robin roost in the evening. The headquarters are in a dense maple swamp, along Beaver Brook about $\frac{1}{2}$ mile above the Cascade. A large part of the birds are spotted-breasted young, but among them I detected a number of adult males. Considerable singing heard. The roost is already very perfect.

July 16. Count from piazza, 54, 7.10-7.50, Sunset, 7.18.

July 18. In the evening counted the Robins that roosted on western side of the roost: 6.55-7.00, 4; 7.00-7.05, 17; 7.05-7.10, 18; 7.10-7.15, 84; 7.15-7.20, 76; 7.20-7.25, 63; 7.25-7.30, 89; 7.30-7.35, 68; 7.35-7.40, 22; 7.40-7.45, 9. Total, 420.

July 20. Count from piazza, 35 (7.10-7.40).

July 21. Count from the Knoll $\frac{1}{2}$ m. from roost: 6.35-6.40, 5; 6.40-6.45, 6; 6.45-6.50, 10; 6.50-6.55, 14; 6.55-7.00, 16; 7.00-7.05, 13; 7.05-7.10, 19; 7.10-7.15, 14; 7.15-7.20, 14; 7.20-7.25, 8; 7.25-7.30, 7; 7.30-7.40, 4. Total, 140. Sunset, 7.15.

July 26. Count from piazza, 71 (7.00-7.40 P.M.).

July 30. " " " 151 (6.45-7.30 P.M. Sunset, 7.06).

Mass.
Belmont
1890

Merula migratoria

Sept & Oct

" My recent notes on the Robins are as follows:- Sept. 30, 8 Roost

or I0 flew over the house to-night. Oct. 1. Went to the roost. Saw about 60 come in- most of them about 5.30 (sunset, 5.26). One flock of twelve (I2) went right by the roost up the valley towards Rock Meadow, as if ignorant of the locality of the roost (northern migrants?). Oct. 8. Between 5 & 6 o'clock the roost at Beaver Brook seemed to be quite populous. In the afternoon had seen many passing over Arlington Heights, apparently migrants). Oct. 21. Toward sunset I went to the roost (sunset, 4.53). At 4.50 four Robins flew over, continuing their flight up towards Rock Meadow (cf. Oct 1st). At 5 o'clock another passed over in the same direction. At 5.10 four, at 5.15 three. At this time there was one squealing in the roost, but I did not make out whether he followed the rest later on. The mode of flight, notes, & all the other circumstances were identical with what one sees during the summer roost-flights. The trees in the old roost are now mostly bare & it looks as if the birds had chosen a new dormitory further up the valley "

(H. Farrow in letter Oct. 22. 1890)

Lexington, 21 July, 1891

My dear Brewster:

I read your letter from Wells with the greatest interest and forwarded it to Torrey. I think I was rather more enthusiastic over the Skylark than you seem to be. I shall never forget one superb June morning (1874) when I was walking across the fields from Stratford-on-Avon to the village of Shottery. The mowers were whetting their scythes and the Lark mounted up from my feet pouring forth a flood of song that lasted, I am confident, four or five minutes without cessation. It was hard to believe that this bird was not a living descendant of the Lark of the song in Cybeleine.

I was especially interested in your notes on the song of the Wren. Curiously I do not have the slightest recollection of it. But unfortunately my trip to Europe came at a period in my life when I had almost entirely lost my interest in birds.

There is almost nothing to report of ornithological interest. The birds are going along in a humdrum fashion like the rest of us who are doomed to stay at home. The 12th of June I looked into the Beaver Brook Robin roost toward sunset, and was surprised to find it already quite populous. All that I saw were adult males - very musical.

At that time a good many of the first-brood young were fledged and out of the nest, but I hard-

ly able, I think, to take extended flights. Their notes at that season were easily distinguishable from the old birds', and I think could not have failed to detect ^{them} either by eye or ear if they had been at the roost. It is my present opinion that the males begin to roost before the downy is in advance of the young. I wonder when the old birds first go to the roost.

June 13 I first noticed the evening movement of the Robins in Lexington. From this house their course was exactly in line with the Beaver Brook roost, and for a long time I surmised that they resorted to that place although it is nearly four miles

away. But later I discovered
the nest in ^a wood surrounded by
meadows only $\frac{1}{2}$ mile from
here. The place is very similar
to the Beaver Brook nest.
The two are $3\frac{1}{4}$ miles apart in an
air line.

Mr. Tenny has not yet been
able to find indications of a
Robin-nest in Wetherley, but
I fancy this results from
his station being too far
away from the nearest nest.

I have been a good deal inter-
ested in watching a Humming
bird's nest about a mile from
here. Last Sunday the young
appeared to be about ready to
leave the nest, but the female
still feeds them. A Whip-
poorwill that has sung near
the house all summer has
kept at it as late as the 17th inst.

which seemed to me a rather
late date.

I hope (and don't doubt)
that you, as well as Mrs.
 Brewster and Miss Sim-
mons, are having a glori-
ous time. Please give them
my kind regards, and be-
lieve me

Yours sincerely,
Walter Faxon

P.S. 22 July - I hope you will
continue to write me about
the English birds, as the sub-
ject interests me intensely.
With regard to the Chimney
Swallows breeding in barns
and outhouses, I fear
you know that this was
commonly known at
least as far back as the
time of Foster and Gilbert
White. Indeed, White contends

that it was so in the clays
of Virgil. Perhaps you
will strike some locality
free from chimney-pots
and see ^{the birds} ~~them~~ in the
chimneys. I am quite
sure that I saw them
in the chimneys some-
where in Europe, but
whether in England or
not I cannot say

N.F.

Don't forget to bear the Eastern
Prarie Hens in mind when
you visit the old museum.
I wonder whether you visited the
Free Public Museum at Liver-
pool. It struck me as a
model museum as far as ex-
hibition was concerned

Merula migratoria

Robins.

Arlington Heights

~~Waverly~~, Mass.

I walked over to Mystic Pond this morning, and while crossing over Arlington Heights I fell in with the vastest flock of Robins I ever encountered in winter. There must have been upwards of 100 of them. Their actions were just like what one observes when they begin to gather at their dormitories of a summer evening. I was surprised and pleased to find several of them singing although a biting west wind was blowing at the time. The songs were just as as in the breeding-season, save more subdued,--in fact exactly like the songs heard at the roosts in early summer. O.W.L.'s "light plumage" must refer to their backs for the breasts of all that I examined denoted males in high plumage. In fact all the winter Robins that I see,--as well as the earliest comers in the spring--appear to be males. The attraction for the Robins on Arlington Heights is the privet berries. The ground under the bushes was strewn with their remains, and the faeces of the birds lay upon the ground as black as ink.

Walter Faxon (letter January 13, 1891).

Waverly, Mass.

I have seen Robins (in the same place) January 6³, 9¹, 10², 12². My brother reports a large flock of Robins in Brookline, January 7 and 8. Torrey also reports them at Melrose.

Walter Faxon (letter January 12, 1891).

Arlington, Mass.

Robins seem to be scarce here now, saw one on Thanksgiving Day, none since.

Walter Faxon (letter December 4, 1891).

mass. (Warbler)
Robin Roost (notes by Haxon)

Munda migratoria

I made the following count of robins which flew over this place tonight on their way to the beaver brook roost. The roost is about three fourths of a mile from here in a bee line. The birds went in little flocks about as set down below, although some singles were incorporated with the following flock:---

| 6.35 P.M. | 6.45 | 6.50 | 7.00 | 7.05 | 7.10 | |
|-----------|------|--------|------|------|------|------|
| 7 | 14 | 10 | 8 | 36 | 8 | |
| 8 | 7 | 20 | 29 | 6 | 11 | |
| 4 | 5 | 14 | 13 | 13 | 5 | |
| 12 | 3 | 4 | 23 | 4 | 4 | 7.15 |
| 4 | 4 | 7 | 5 | 6 | 455 | |
| 4 | 9 | 9 | | 10 | | |
| 6 | 4 | 18 | | 13 | | |
| 8 | 3 | Sunset | | 8 | | |
| | 11 | at | | 9 | | |
| | 6 | 6.57 | | 4 | | |
| 10 | | | | 10 | | |
| 5 | | | | | | |

On the 3d I went to the roost, but the water is so high I could not get into the roost very well. It did not seem to be very large, but counting 455 birds three quarters of a mile away from our station, shows that I have greatly under estimated in my counts.

" I got there at 6.30 to-night, and, as the evening was clear, I felt sure of being in good season. Most of the robins were already arriving. Eighteen came in the first five minutes. At my end during the hour, between 6.30 and 7.30, 1267 birds arrived; or rather, I counted that number. It is impossible to be accurate. They come so fast at times that you cannot turn your head to see what is going on on the other side of you. Without doubt, I missed many. Assuming that my eye took in a quarter of the circuit (but it really took in less than that--- very much less for the last quarter hour,) you have more than 5,000 arrivals in the hour. Birds were still coming when I came away, but a black cloud made it so dark (suddenly dark) that I could see only the stragglers that happened to go close by me. I have a suspicion (not based on much, to be sure,) that the roost is growing larger night after night. My birds seemed to come more in flocks to-night, which made the counting more difficult. Between 6.40 and 7.30 to-night, I, 235 against 1072 last night in the same time. Of the whole number to-night 818 arrived before the sunset gun."

----- -- Bradford Torrey, letter of July 29 1889. (to W. Faxon).

Merula migratoria (Roost at Melrose)

Mr. Faxon tells me that he has given you my bulletins from the Melrose Robin roost and I have today written him that my previous figures prove to have been exaggerated. They were based on the assumption that the birds entered the wood in about equal numbers on all sides. It turns out that at the easterly end, where my counts were made, many more birds enter than on the northern or western side. I have made three counts at the eastern end: July 28, 1072; July 29, 1267; August 1, 1533. Last night on the northern side I counted only 383. I am not sure what the increase at the easterly end means,--- whether an increase in the whole number, or only an increased gregariousness, leading the birds more and more to go and come together. In counting at the populous end, I was sure that I fell much short of getting all the birds--- hundreds short, I believe. My opinion is that the entries on that side numbered more nearly 2000 than 1500. But my total estimate must be cut down to 3000, or perhaps less. I am surprised to learn from Faxon that the Cambridge congregation is much smaller, "hundreds instead of thousands",--- and it occurs to me that you might think it worth while to drive over and see it, as you will wish to describe the habit fully in your book.... The gathering begins in a scattering way, by half past five, and the time will of course grow earlier and earlier... There is not much to be learned, so far as I can make out, by going into the wood itself.----- Bradford Torrey, letter of August 3, 1889.

Merula migratoria(Roost at Melrose Highlands),----I

" Last night I discovered a robin-roost within half a mile of my house, and have been there again to-night. It is in a thick grove of small hard-wood trees, mostly white birches. I believe there were more than a thousand birds there this evening-----

basing my belief partly on the sound of their wings as I went in among them; but more on account of the birds seen to enter at one corner. Faxon told me a week ago of the Cambridge ^{West}, and I at once ~~answered~~ ^{to me} that I had seen robins for some time past, evidently flying to some rendezvous at about sunset."----- Bradford Torrey, letter of July 26, 1889. (to W. B.)

" I went to my roost to-night again. When I arrived at 6.40, the birds were already dropping in. I took up my station at the end opposite the one where I stayed on Friday, and between 6.40 and 7.30, I counted 1,072 arrivals. This was at one end only, and even here I no doubt missed many, especially during the last half hour after it had begun to ^{be} look dark. It is doubtful whether my observations covered a quarter of the circuit, which would indicate that at least 4,000 robins entered the wood during that 50 minutes. There is no telling how many went in before I arrived, and they were still straggling along when I came away; it had grown so dark that I could see only those that passed right by me. If you have any knowledge as to how and when the roost breaks up in the morning, please communicate.

537 birds came in the first 20 minutes; 535 in the last 30 ^{minutes}. 797 of the whole number arrived before the sunset gun was fired. There is no doubt that many arrived before I got there." ----- Bradford Torrey of July 28, '89.) (to W. Faxon)

" Went to the roost at 3.30 o'clock this morning, getting there at 3.40. The birds came out just as they go in, singly, and in flocks of two or three, or eight or ten. Nobody--- no casual passer, at least, would notice anything peculiar. The first line went out, as far as I saw, at 3.45. At a little before 4, there was a chorus of singing which lasted perhaps ten or fifteen minutes only. This too was nothing to be remarked by an ordinary observer(I have never heard a note of song in the evening).- At sunrise, I went into the wood and found it practically empty. There seemed to be no more robins there than one would expect to find in any such place. Almost without exception the birds started off low, as if they were taking only an ordinary flight. A good number alighted in the field near me. Apparently the dispersiojn is gradual in every respect.. They make considerable cackling, of course(beginning very soon after my arrival). but nothing to what one would have expected of so many birds; no such hubbub as is made, for instance, by a large flock of black-birds in the spring."----- Bradford Torrey, letter of July 30, '89. (to W. Faxon)

Harvard University Quinquennial Catalogue and Necrology.

The Necrology is published in the University Bulletin which appears in January, May, and October. Information concerning deceased Graduates is earnestly desired.

WM. H. TILLINGHAST, Editor.

HARVARD COLLEGE LIBRARY,

Cambridge, Mass.,

Feb. 25 1892

Dear Mr. Brewster

I have a little evidence pointing toward the existence of a summer robin roost in Norton's Woods over thirty years ago. Rev. William J. Potter, now of New Bedford, entered college in 1851, graduated in 1854, and spent a year at the Divinity School afterwards. He was recently at my house and, speaking of his life at Divinity Hall, mentioned that he used often to take walks after tea in Norton's Woods, and that he found certain places always full of robins - very great numbers of them, so that he and his friends used to go to those places sometimes for the purpose

of seeing the birds. I did not
learn that he had ever watched
them entering the wood. When he
told me this he was unaware
that the robin roosts had been
made an object of study, & had
I think, never heard that name
used applied to such gatherings.

I do not know that this will
have any interest for you, as the
information is somewhat vague,
but you may have received
it from other sources. If it shall
have any value I do not doubt
that my uncle would be glad
to give you his recollections at
first hand.

Yours truly

Wm. H. Tillinghast

Cambridge

April 6, 1892

Dear Mr. Brewster

I have received
a letter about the robins in
Watson's woods from my uncle,
which I meant to send
you long since, but it got
overlooked. What his remembrance
may be worth I do not know,
but they seem to me to establish
the existence of a roost in
those woods nearly forty years
ago. My uncle used to enter the
woods back to Divinity Hall,
follow a path that lead nearly to
the mansion, then take another
to the right and so come into
the drive way. He remembers
the robins as being chiefly on his
right hand.

Yours truly

Wm. H. Tillinghast

New Bedford, Mar. 10.
1892

Dear Will;

My recollections of the robins in Norton's woods can have very little if any scientific value. I made no specific observations, - did not know then that they were acting scientifically.

But my recollections certainly antedate my residence in Divinity Hall. I lived there from Sept. '54 to July '57, & was then wont to hear them. But I know that I heard them before ~~there~~ my College graduation in '54; for my most distinct remembrances of them include the memory of walks in the woods with certain classmates who were not in Cambridge after graduation. My college

I never applied any accurate (or inaccurate) census methods for ascertaining the number of the robins, but the statistics of my observation would put them among ~~the thousands~~ rather than the fifties or the hundreds even. I don't remember seeing them enter the woods or leaving. It was all the western side of the woods, ~~directly~~ & north west of the main drive way, where they especially congregated. I should say, if not put on my oath, that they were there during all my divinity-hall years; but if any one should affirm that they complected their careers & left Cambridge before I did, I could not prove the contrary. So you

years were '50 to '54. I have nothing to fix the time of my first walks through those woods; feel pretty sure it was not in my freshman year. I should say that these most distinct recollections date from '52 to '54, & the times of year & day were the spring & early summer, after supper, in the long twilights. (The birds may have been there in the morning too, but I was not). It was robins that I specially noted. This I knew both by sound & sight. Their singing was so vociferous as almost to drown conversation. There may have been other birds there, but in the multitude of robins, they had little chance for distinction.

be my recollection of the creature is of
little scientific account.

I am expecting to see you on
Saturday evening next & hope nothing
may occur to prevent your coming.

Yours affectionately,
Wm L. Miller

17 Arlington St.,
N. Cambridge,
July 11 1892. Mass..

Mr. Brewster,

Dear Sir:-

May I trouble you with a ques-

tion or two?

Some robins built a nest near us; one day we heard a violent bird-fight going on near the nest of young robins. A black-billed cuckoo fell dead as our son reached the tree-- killed by the robins.

I thought I would write up the little tragedy, and in preparing todoso have become interested in some evolution questions.

Can you tell me or tell me where I can get information on the following points?

1. Isthe nest-building habit of the American cuckoo a survival or a more recently acquired habit?
 2. Do none of the European or foreign cuckoos ever build nests? I know in general they do not.
 3. Do the foreign cuckoos eat the eggs and young of other birds? An old Scotch verse would imply they do the former.
- "I eat little birds eggs to make my voice clear".

I am sincerely,

Fanny D. Bergen
per B.

Merula migratoria.

Chestnut Hill, Mass.

May, 1897 -

Mr. Bemis, of Esterbrook & Co., told the following story May 7, 1897 to William Brewster about a female Robin. Mr. Bemis lives at Chestnut Hill Reservoir and for five mornings in succession, May 3, 4, 5, 6, 7, at about daylight or 4.30 A.M. a female Robin has tapped with her beak continuously on the windows of the house for from 1 to 1 1/2 or possibly 2 hours. She has tapped on four different windows, but has stuck to one window each morning. The tapping has not been confined entirely to the early morning, but has occurred at intervals during the day. Naturally the morning has been the most troublesome. The Robin has a mate and the pair are about the place continually and are perhaps nesting near the barn. This incessant noise has been very troublesome and various measures have been resorted to in order to obtain peace, without injuring the bird. A red cloth has been hung up by the window, and a scarf has been arranged to imitate a cat and has been put outside the window, but all to no effect. The rapping has continued as before, and the panes of glass have been dirtied to such an extent that they have required a washing. The bird seems to show no special nervousness or anxiety as might result from loss of mate and the like.

Note by William Brewster.

Tapping on the window by birds has been noticed before, and the above facts are of special interest in connection with the various theories on the subject. One theory is that it is the male

Merula migratoria.

who sees an apparent rival in the reflection in the glass and attacks him, while another theory is that the male or female bird is tapping for a lost mate.

Mr. Alex Hayes tells the story of a yellow-throated bird (probably the Yellow-throated Vireo) tapping on his window in 1896.

Mrs. Edward Burnett also tells of a little yellow bird (probably a Yellow Warbler) doing the same thing.

Merula migratoria.

Concord, Mass.

Roost.

1898. When the wind is south Robins in considerable numbers
May 11. assemble at evening in the swamp behind Ball's Hill. There
were a dozen or more of them there to-night. Earlier in the
season they roost in some dense white pines but of late they
have been resorting to the thickets of high bush blueberry
and cassandra. Most of them seem to be males and they sing
freely before going to bed making a great noise. They roost
very low down - only three or four feet above the ground.

Peterborough, New Hampshire.

1898. Abundant up to July 20th but after that date seen only
July 5 occasionally and in small numbers. In full song up to July
to
Aug. 15. 21st and heard singing feebly on the 24th, after which all
singing ceased.

Merula migratoria.

Concord, Mass.

Roost.

1898. About 6.30 P.M. I took a walk around the eastern end of March 20. Ball's Hill. Saw fifteen or twenty Robins flying in to the old spring roost in the dense, bushy pines on the edge of the swamp. They all came across the river from the W. Bedford shore. Several of them sang for a moment before going to sleep. I do not think that they congregate at this roost in spring excepting when there is a strong N.W. wind.

Roost and singing on wing.

1899. A few Robins came to the spring roost in the dense pines April 24. behind Ball's Hill this evening. All appeared to be males and there was, as usual, much singing and calling. I was astonished to see one bird sing on wing. I heard him in the distance at first. When he appeared he was flying in the usual manner but rather slowly. He continued his song without the slightest break when and after he reached his perch on the topmost spray of a tall pine. There was nothing peculiar about the song. Evidently it was not a real flight song but the bird was simply so full of his theme that he could not wait until he reached the end of his short journey.

Roost.

May 6. The Robins came into this swamp (behind Ball's Hill) to roost as usual - about a dozen of them, all males I think. They are roosting this spring in the blueberry bushes - not in the pines as formerly.

*Notes from St. John. N. B.
by Harold Gilbert.*

Large numbers of Robins, (*Turdus migratoria*), remained here during the whole Winter. The latter bird I have frequently observed here during the Winter, but never before or since have I seen or heard of the Cedar Bird remaining in the Province later than September, which is their usual time for migrating south.

O. & O. VII. June 1882 p. 134

Newfoundland Notes

Robin (*Turdus migratoria*). First seen April 6th; common soon afterwards; singing.

*G. H. Merriam. Locust Grove,
New York.*

O. & O. VIII. June, 1883, p. 43.

*Birds of Upper St. John.
Hatchelder.*

1. *Turdus migratorius* Linn. ROBIN.—Rather common at Fort Fairfield. At Grand Falls it was abundant everywhere.

Bull. N. O. Cl. 7, April, 1882, p. 108

*Birds within Ten Miles of St. John.
Faintly Obs. Robinson & Merriam.*

1. *Turdus migratorius*. ROBIN.—A common summer resident. Arrives about the first of May, and remains till late in November. Seen Dec. 22, 1879.

Bull. N. O. Cl. 7, Oct, 1882, p. 234

*Last Dates Migratory Birds observed by
E. D. Wintle, Fall 1885, Montreal, Can.*

Oct. 31, Robin,

O. & O. XI, Mar. 1886, p. 44

Bird Notes from Toronto.

April 4, 1886. *Merula migratoria* Linn. Gizzard contained three hipps of *Rosa blanda* and one larva of *Pyrrharcetia isabella*. Ground frozen. It is not usual for any bird to feed on the larvae of this moth.

William Brodie, Toronto, Can.

Auk, V. April 1888, p. 211.

*Dwight. Summer Birds of
Prince Edward Island,*

Merula migratoria. AMERICAN ROBIN.—Very abundant in the more open country. An occasional one is said by Mr. Bain to remain through the winter, subsisting on the berries of the mountain ash.

Auk X, Jan, 1893, p. 15

The Robin Wintering at Godbout, Quebec.—I desire to place on record what is to us here a most unusual occurrence, viz., the wintering of the Robin (*Merula migratoria*) on the north shore of the St. Lawrence. On looking over my notes on the species, extending over twelve years, I find that the latest bird previously seen was noted on December 5; other years from 25th to 30th November. Arrivals in the spring have been noted from April 18 to May 6. This year I kept recording their occurrence day after day, always expecting that it was going to be the last seen, but they are here still (Feb. 4, 1891), and intend to stay I believe. Every day when the tide falls, leaving the rocks or some shoals bare, they flock to these places in hundreds for the purpose of picking up gravel and small shells; when these places are covered with ice, as often happens, they hop about from one piece of ice to another, following the shore line, evidently thinking (if birds can think) there must be something wrong. I have shot several from time to time to see what their crops contained, and invariably found in them small shells, principally minute, blackish whelks, gravel, and the fruit of the mountain ash, and sometimes bits of seaweed.

All the birds I shot were in first rate condition. The winter has been a very severe one—Feb. 2 and 3, 24 and 32 degrees below zero (Fahrenheit)—but this does not seem to trouble them at all. The reason for their wintering here is possibly due to the enormous crop of mountain ash berries.—NAP. A. COMEAU, Godbout, Province of Quebec.

Auk, 8, July, 1891, p. 317-318

An Ornithologist's Summer in Labrador
M. Abbott Frazar.

Merula migratoria, American Robin. Arrived at Esquimaux Point on May 17th, and was irregularly distributed along the coast, being found wherever the location suited, but wanting in others, as at Cape Whittle.

O. & O. XII. Mar. 1887. p. 35

Birds, Haute Island, Bay of Fundy, July 26, 1887. W. L. Bishop, Kentville, N. S.

Robin, *Turdus migratorius*; common.

O. & O. XII. Sept. 1887 p. 146

Summer Birds of Bras D'Or Region
Cape Breton Id., N. S. J. Dwight, Jr.

[59. *Merula migratoria*.

Auk, 4, Jan., 1887. p. 16

Breeding Dates of Birds in Kings
County, N. S. Watson L. Bishop.

Robin (*Merula migratoria*). May 18, 27, 29.

O. & O. XIII. Mar. 1888 p. 45

March 30, 1890, first large flock of robins seen at
Halifax, N. S. H. Austen.

O. & O. XV. Apr. 1890 p. 62

Ornithological Trip to St. Bruno, P. Q.
May 25, 1885. E. D. Wintle, Montreal.

Robin, scarce.

O. & O. XI. May. 1886. p. 75

Summer Bds. Restigouche Valley, N. B.
July, '88. J. Brittain and P. Cox, Jr.

Merula migratoria. ROBIN.—Very common.

Auk, VI. April, 1889. p. 119

Merula migratoria

L'Anse aux Roches, Province
of Quebec, Saguenay District,
18 miles N. of Tadoussac

Mrs. Walter Mackenzie tells
me that one of his guides
a perfectly reliable man
saw in January a flock
of 200 or 300 Robins at
this place. This about
about 1890

Newfoundland Notes. A Trip up the
Humber River, Aug. 10-Sept. 24, 1899.
Auk XVII, Jan. 1900, p. 73.

50. *Merula migratoria*. AMERICAN ROBIN.—One seen August 31.
Said to be common. Louis H. Porter, New York City.

Some Winter Birds of Nova Scotia. By C. H. Merrell.

33. *Merula migratoria*. AMERICAN ROBIN.—A pair seen at Shulee
in a dogwood tree feeding on the berries on Dec. 24, and one was seen
in the same place next morning. I was informed that a pair had wintered
there several times. Migrants arrived March 28.

Auk, XVI, July, 1899, p. 253.

New Brunswick Notes.—It is evidently news to ornithologists that
the American Robin (*Merula migratoria*) should be a winter resident in
New Brunswick, yet such is without a doubt true. A big-game hunter
informed me that about a large spring near the headwaters of the Nepisquit
River Robins were seen about the 20th of December, 1898. In the
latter part of March, 1899, this locality was again visited and the Robins
were there to the number of about fifty.

The Robins leave this locality (Scotch Lake) late in October or early
in November, returning generally in the first week of April, but some-
times in the latter part of March. This locality is situated about 46° N.,
quite a distance south of the Nepisquit.

Willie H. Moore, Scotch Lake, York Co., N.B.

Auk, XVII, April, 1900, p. 177.

Birds of N.E. coast of Labrador
by Henry B. Bigelow.

84. *Merula migratoria*. ROBIN.—Locally common. Several large flocks appeared at Port Manvers on September 6, apparently from the North.

Auk, XIX, Jan., 1902, p. 31.

*Summer Birds of the Cobalt Mining Region,
Nipissing District, Ontario.
by Frederick C. Hubel. Auk. X x IV, Jan. 1907, p. 82.*

74. *Merula migratoria*. AMERICAN ROBIN.—Fairly common about the partially cleared sections.

*Birds of Ontario, Canada,
by James H. Fleming.
Part II Land Birds.
Auk, XX, Jan. 1907, p. 86.*

289. *Merula migratoria*. ROBIN.—Abundant summer resident, March 24 to October 24, earliest spring record, February 22, 1906; irregular winter resident, January 1 to February 9; breeds abundantly.

Maine (Brewer)

Turdus migratorius

1886

Early arrival

March 22

"On the 22nd noticed berries on snow under my mountain ash. On the 23rd saw a ♂ Robin in the tree feeding on the berries. Afterwards learned that three Robins were seen in Brewer the 22nd and others in Bangor. I have twice known Robins live here partly through the winter by taking refuge in barns but in both cases they died before spring. The above is the earliest spring arrival I ever noted. Snow in woods is 3 ft deep, in towns 2 to 4 ft. (M. Hardy in letter Mch. 24/1886)

Maine (Brewer)

Turdus migratorius

~~1886~~

Capturing a grasshopper flying.

"I have this year seen a Robin chase and capture a grasshopper on the wing."
(M. Hardy in letter of Sept. 20-1886)

Maine (near Bangor)

Spring arrival

1887

April 10

"Heard the first Robins yesterday. The snow still deep in woods & very little bare ground in fields" (M. Hardy letter of Apr. 11)

Musula migratoria.

Maine (Bangor)

Merula migratoria

1889

Wintering

"One Robin and six Cedar Birds have
lived in a Bangor garden all winter.
This is the first Robin I ever knew
to live through the winter here
although I have several times known
them to live through part of the
winter & finally die of the cold."
(M. Hardy letter Mch. 15/89)

Maine
near Bangor

Merula migratoria (migrating by day)

Our robins all migrated at once early in November. Thousands left in one day. Several hundred could be seen at once in a large field and they were continually shifting ground as they slowly moved southward. There was a furious south-west gale blowing all day. Two days afterwards not a robin was left in the country.

-----Manley Hardy,--Letter of Dec. 3, 1884.

Summer Birds Tim Pond Me. by F. H. C.

Robin, (*Merula migratoria*). Only one seen around the camps in '84. In '85 saw a pair, and found young just able to fly. Also found nest in a small yellow birch.

O. & O. XI, Feb. 1886, p. 29.

Birds of Dead River Region, Me. F. H. C.

4. *Merula migratoria*, (American Robin). At present a common summer resident in all settled portions of the counties. Breeds commonly. I was informed on good authority that their occurrence in the northern portion is recent, they appearing within a few years in much larger numbers than natural increase could account for, therefore the conclusion remains that they must have "emigrated northward" from some former breeding locality. Since the writer's experience the Robins have penetrated some twenty miles in the wilderness and nested at both of Kennedy Smith's camps at Tim and Seven Ponds, increasing in numbers each season.

O. & O. XI. Aug. 1886. p. 114

Fall Birds of Northern Maine.
F. H. Carpenter.

Robin (*Turdus migratorius*). A couple of stragglers were seen near camp.

O. & O. XII. Nov. 1887 p. 183

Winter Notes from Portland, Maine. During the very mild winter of 1888-89,

Robins wintered in unusual numbers in and about the city.

J. C. Brown,
Portland.

Auk, VI. July, 1889. p. 281.

Turdus migratorius

Wintering in Maine.

Winchham, Maine
Winter

Apropos of a note in "Forest & Stream" (Vol. XXII, No. 1, p. 7) Manly Hardy writes me: "Robins always winter within fifteen to twenty miles of Winchham on Marshall's and other islands, living on mountain ash berries but I have never heard of the Golden-wing [*Colaptes auratus*] or Blackbird in this vicinity before."

Summer Residents on Southwest
Island. T. H. Montgomery, Jr.

761. Robin. A few pairs at Boothbay.
About a dozen on Bobson's Island.

O. and O. 15: Nov. 1890. p. 163

Maine

Turdus migratorius

1884

Heavy autumnal flight

Oct.

" A year ago last October I saw a remarkable flight of Robins. The wind was nearly South, remarkably strong and steady, with no breaks or lulls from morning to night. In the morning started for Black-cap Mt. (12 miles from Brewer). Our course was due East, hence across the wind. At 9 A.M. began to see Robins flying very low, rarely more than six feet above the earth, all heading directly into the wind. At this time the stream was not very wide but when we returned at

Maine (off Cape Elizabeth)

Turdus migratorius

1886

Migrating by night.

April 14

Henry M. Spelman while becalmed in a yacht about two miles off Cape Elizabeth heard Robins passing overhead at frequent intervals ^{during the night}. They uttered their familiar call notes freely and he is sure he was not mistaken in his identification of them. The night was still and cloudy.

about 4 P.M. it was more than
a mile wide and the first
sighting was this extent also with
their birds. They were literally in
thousands, one could often count
fifty in a space of two or three
acres. They would frequently rest on
fled for a few minutes, then pass
on their places being filled as
soon as vacated. They were not in
flocks, but each bird seemed to
act independently. One would often
be strong that they could not fly far
at a time but they kept on the down
many times to low as to pass through
the fields in the pines. I saw none
before that day that I saw none
before a bird in a month. The
next day not one could be found
and I cannot remember seeing any
afterwards that autumn." (Mundy
Mundy in letter Apr. 6 - 1886)

Maine (off Cape Elizabeth)

Larus migratorius

1886

Migrating by night.

April 14

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a yacht about two miles off Cape Elizabeth
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intervals ^{during the night}. They uttered their familiar call notes
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in his identification of them. The night
was still and cloudy.

A Remarkable Number of Robins in Maine in Winter.—The winter of 1910-1911 was rather steadily cold in southern Maine. December and January brought little snow, and the ground was bare most of the time during those months; but in February much snow fell. Nearly if not quite throughout the season there were many more Robins in Portland and its vicinity as afterwards. On December 31 I found a least twenty-five feeding in some open lots in the Western Promenade section of the city. The next day I counted more than a hundred scattered about the same lots, in hedges, in the trees of an old orchard and on the ground; there were not less than a hundred and twenty-five of them. On each of the five succeeding days I found an equal number in the same locality. There were but forty in evidence on January 6, but on January 7 there were more than two hundred concentrated within a distance of a hundred yards on Arsenal Street, while several dozen others were grouped in trees not far away. On January 8 and 9 this large flock was still in the neighborhood. Then a week passed in which I could not find a single individual, though I made a search daily of the district previously frequented by the birds. On January 17 a flock of twelve appeared on Arsenal and Bramhall Streets. For the subsequent ten days my record was as follows, the birds always occurring in the same part of the city:

January 18, twelve birds.

- " 19, none.
- " 20, fourteen birds.
- " 21, ten birds.
- " 22, two birds.
- " 23, twelve birds.
- " 24, none.
- " 25, none.
- " 26, eleven birds.
- " 27, eleven birds.

Ten days now elapsed during which I saw none. On February 6, however, I came upon a small flock—perhaps half-a-dozen birds—at the corner of Free and South Streets, in the center of the city. They were moving through the tops of tall elms and did not long remain in sight. A good deal of fruit was still left on some of the mountain ash trees; but, in spite of frequent search within the limits of Portland, I could find no more birds until February 25, when I discovered one in the Western Cemetery.

In the meantime from many points near the city reports had continued to come to me of the presence of great numbers of Robins. The newspapers had also taken up the subject. I heard directly from trustworthy persons in Scarborough, Cape Elizabeth and Old Orchard and on Cushing's, Peaks and Great Chebeague Islands. The largest flocks were generally said to contain from thirty to forty birds, but I was told of one on Cape Elizabeth of one hundred or more and one on Cushing's Island of fully two hundred. The main body apparently withdrew from all these places before or about

neighboring towns than are to be expected there in winter, and their abundance for a part of the time appears unprecedented. Reports of the birds began to reach me early in December, but Miss Caroline M. Stevens, of Portland, whose father's house occupies a site especially favorable for observation, tells me that she noticed unusual numbers late in November as well as afterwards. On December 31 I found a least twenty-five feeding in some open lots in the Western Promenade section of the city. The next day I counted more than a hundred scattered about the same lots, in hedges, in the trees of an old orchard and on the ground; there were not less than a hundred and twenty-five of them. On each of the five succeeding days I found an equal number in the same locality. There were but forty in evidence on January 6, but on January 7 there were more than two hundred concentrated within a distance of a hundred yards on Arsenal Street, while several dozen others were grouped in trees not far away. On January 8 and 9 this large flock was still in the neighborhood. Then a week passed in which I could not find a single individual, though I made a search daily of the district previously frequented by the birds. On January 17 a flock of twelve appeared on Arsenal and Bramhall Streets. For the subsequent ten days my record was as follows, the birds always occurring in the same part of the city:

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Lurdus migratorius. - Not common, Profile House N. H. Aug. 1865.

Lurdus migratorius. - Rather abundant, Shelburne, N. H. Aug. 8-29-1865. R. D.
Profile House, N. H. Aug. 1-12-1867.

Lurdus migratorius. - Common; one imitated the cry of ^{admiral} *Aquila* ~~cane~~ ^x
very closely.

migratorius. - ^{Rye Beach, N. H. 1866 - 1885.} Common, breeding (as notes) July 23-24, 1885. Abundant

2. " *migratorius*. - ^{Rye Beach, N. H. July 23-24 1885.} Abundant - *purpureus* ✓
Wolfeboro, N. H. June, 17-1887.

1. *Merula migratoria*. - abundant

Wt. Washington, N. H.

Sept. 12. 1884 One among dwarf spruces about
3 miles from the summit near
the carriage road (E. P. Pickwell)

Merula migratoria

Early Arrivals.

A. Farmer. Amoskeag, N. H.

[March 5, Robin (*Merula migratoria*);]

O. & O. Vol. 17, April 1892 p. 62

New Hampshire (North Conway)

Merula migratoria

1886

Mich 20

"It may be worth noting that I saw three or four Robins at North Conway, N. H., during a Snow Storm on March 20. The report was that they had been seen there a week earlier!" (J. H. Scudder in letter of March 22, 1886)

Wolfeboro, N. H. June 18, 1889.
3. *Merula migr.*, abundant in town

Bds. Obs. at Franconia and Bethlehem
N. H. July-August, 1874. J. A. Allen

49. *Merula migratoria*. Rather common.

Auk, V. April, 1888. p. 155

Winter Birds of Webster, N. H. by Falco.

Robin, (*Merula Migratoria*). One specimen seen
Dec. 25, 1880.

O. & O. X, Jan. 1885. p. 14

Birds Obs. at Bridgewater, N. H.
July 12-Sept. 4, 1883. F. H. Allen

Merula migratoria.—Common.

Auk, VI. Jan., 1889. p. 77

Birds Obs. at Moultonboro, N. H.
July 21-Aug. 11, 1883. F. H. Allen

Merula migratoria.—Common.

Auk, VI. Jan., 1889. p. 79

F. B. SPAULDING, LANCASTER, N. H., reports Robins as numerous in his vicinity during the past winter, something very unusual, as they generally depart in November and do not appear again until the following March.

O. & O., XI, May, 1886, p. 80.

**Summer Birds of Presidential Range,
White Mts. A. F. CHADBOULIN.**

47. *Merula migratoria*. AMERICAN ROBIN.—On July 12, 1886, a pair were seen at an altitude of 5080 feet on the Crawford Bridle Path. They may have been stragglers from the valley below, but as it was not during the migration, and there had been no storm for several weeks, it seems more likely that they had nested in some stunted firs and spruces on a southern slope near by. No others were seen.

Auk, 4, April 1887, p. 108

Birds Obsvd. near Holderness, N. H.
June 4-12, '86, and 4-11, '86. W. Faxon

64. *Merula migratoria*. ROBIN.—Common.

Auk, V. April, 1888, p. 151

Bds. Obs. in Franconia, N. H. June 11-21
'86, and June 4-Aug. 1, '87. W. Faxon

86. *Merula migratoria*. AMERICAN ROBIN.—Common.

Auk, V. April, 1888, p. 153

Arceuthobium

June 15th 1892

[illegible]

1895.

11. 3 4 5 6

1. The first of these is the fact that the
 2. the second is the fact that the
 3. the third is the fact that the
 4. the fourth is the fact that the
 5. the fifth is the fact that the
 6. the sixth is the fact that the
 7. the seventh is the fact that the
 8. the eighth is the fact that the
 9. the ninth is the fact that the
 10. the tenth is the fact that the

Winter Record for the Robin in Hanover, N. H.—January 24, 1906, following a week's thaw and exceptionally warm weather for the season, two Robins (*Merula migratoria*) appeared in the trees about the college campus. Both seemed to be males, one of them uttering a few song notes. They were not seen again. The presence of Robins in this region in winter is so unusual that their occurrence is worthy of record.—FRANCIS G. BLAKE, *Hanover, N. H.* **Aug., 1906, p. 2-27.**

E, Hanover, N. H.
 Bull. XXIII, Apr., 1906, p. 229.

Robin, March 16;
First Arrivals, C. O. Tracy, Taftsville, Vt.
O. & O. VIII. Sept. 1888. p. 71

Notes from Taftsville, Vt. by C. O. Tracy

The northern influx of Robins,
(*Merula migratoria*.) occurred Oct. 6th to 9th, in-
clusive, thousands of them passing this place.

O. & O. X, Jan. 1885. p. 10

85. *Merula migratoria*. AMERICAN ROBIN. — Abundant, especially in the valley. I was surprised to observe a good many in the heavy timber along the Notch road, far from clearings. I saw one also at the summit.

Mass. (Middlesex Co.)

Turdus migratorius.

1885

- July 7 At daylight this morning during a light rain there was a full chorus of Robins, the first I have heard for several weeks although they ^{still} sing now or less in a desultory manner during the day.
- June 12 Found it breeding abundantly in the Maple Swamp. Three nests examined contained young nearly ready to fly.

Musula migratoria Mass. - near Cambridge.

1886 Jan'y 29th

" Feb. 9th - 10th

" March 6th - 18th - 26th - 28th

" April 9th - 12th - 19th - 23rd - 27th

Middlesex Co., Mass.

Turdus migratorius

1886

Spring

- March 18 Several alive, in small numbers, & local summer birds. I saw several *adipiscis* about on carous this morning, and at sunset they were calling in the tree tops. Robins have been about all winter but these are evidently different birds.
- " 26 In full song this evening at sunset.

1888

Oct. 26th - 27th

Nov. 2nd - 6th

Mundo migratorius

Turdus migratorius

Winter arrival

Cambridge, Mass.
Feb. 1, 1882

Early this morning I saw a flock of about twenty Robins sitting in the tops of the elm trees on Sparks St. We had the heaviest snow-storm of the season last night, about eighteen inches falling. Nevertheless I think these birds must have lately come from the South.

I have not heard of any Robins being seen since December but a small flock of Cedar Birds was noted at Milton, last week, by Whiting.

Turdus migratorius

Wintering in Mass.

West Medford, Mass.
Dec. 30, 1882

At Maynards I saw to-day a Robin that had been killed this morning at West Medford. The gentleman who brought it in told me that he saw seven or eight at the same time.

Hayward saw one about a week ago at in Cambridge and others have been reported in this vicinity.

January 27, 1883. Robins are seen almost daily, often in large flocks. They are evidently wintering in considerable numbers.

- 1884,
 Aug. 19 For half-an-hour or more this evening Robins were passing over Crown Hill, Watlington, in loose flocks all heading for Rock Meadow (the Willows) where they must have a roost.
 " 20 Heard a Robin singing loudly & steadily this evening (Watlington). Have heard no others for two or three weeks.
 " 25 Found the roost on Rock Meadow. It is in the maple woods shading Clement's Brook just above the upper mill-pond. Thousands of Robins pouring in from all directions at sunset,

Man. (Bedmont & Lexington)

Merula migratoria

Large migratory flocks. Roost.

- 1888
 Nov. 6 Saw fully 200 Robins to-day in three flocks two of about 50 each, one of at least 100 birds. They were in birches and were feeding mostly on the ground, tame but subject to sudden panics as usual. Evidently they were migrants just down from the North. I heard none singing but a low, sweet murmur occasionally won from their midst, as several called ^{simultaneously} in soft undertones.
 At sunset saw a succession of flocks flying into the maple swamp (now Asplens) just north of the Willows on Rock Meadow. Later the flock

Auk, XII, July, 1895, p. 303.

Merula migratoria.

In relating the circumstance to a gentleman whose knowledge of our home birds is only exceeded by his modesty, he told me that he once heard a Robin (*Merula migratoria*) imitating perfectly the cry of the Whip-poor-will. I could reconcile the statement with personal experience when only last month I listened to a Robin whose pipe had evidently been attuned to the wild cry of the Nightjar or perhaps to the strains of more than one bird of song, for it was very unlike his own clear, excellent music. The ways of birds are sometimes quite as unusual as their voices.

G. S. Mead, Hingham, Mass.

them passing one high until one
the west, then dropping like arrows
with short wings, falling steadily in
close to the ground nearly inside
against the dark shadow of the
woods. All silent, flying with
even definite rhythm.

Aug. 26. Found a new roost, in background
in a dense, heavily wooded part of oak
& red maple, near Rutland St.
Many hundred birds were flying

Sept. 1. ⁱⁿ flocks in new clearing.

of 100 birds started from the
bottom here in the same direction,
I believe they were all going
to the same place to roost.

Mass. Middlesex Co.

Turdus migratorius

1885

Wintering

Dec. 22

On this morning eating mountain ash berries in Mr. Russell's place (Cambridge). Large flocks of Cedar Birds have resorted to this tree almost daily for a week or more. This Robin is the first reported to winter here.

1886

Jan. 29

Saw a flock of thirteen flying over the cedars bordering Prospect St. (Belmont).

Feb. 9

About 20 with Ampelis feeding on cedar berries (of which there is an abundant crop this year) - Belmont

" 10. About 50 among cedars. (Prospect St. Belmont)

MASS. (Middlesex Co.)

Cambridge

Turdus migratorius

1886

Appearance in Dec.

Dec. 8

Saw two Robins in Mr. Hubbard's evergreens at sunset. Since October I have neither seen nor heard of any in this vicinity. On Dec. 5 a foot of snow fell here and there has been a heavy fall from Maine to Virginia

Merula ^{Chalchicomula} E. Mass. 1885.
 Jan. 1st Feb. 5th x Mch. 25th Apr. 1st 5th singing
 June 12th July 1st 17th Aug. 30th Oct. 2nd 5th

Pigeon Cove, Mass. July 29-1885. *very m.*
 1. *Turdus migratorius*. - Abundant - *reg. n.*
 Princeton & Rutland, Mass. Aug. 2-1885
 1. *Turdus migratorius*. - Abundant - 18 in full song
 Princeton & No. Rutland, Mass. June 16-1888.
 1. *Merula migratoria*. - Abundant
 Winchendon, Mass. June 1888.
 11th 12th 13th 15th 16th 17th 18th ✓
 Falmouth, Mass. 1889.
Merula migratoria July 4th 11th 14th 21st 28th

Mass. (near Concord).

1887

April 7th 12th

May 8th 10th 11th 13th 16th 17th 21st 23rd 25th 26th

June 2nd 4th 6th 7th 16th 17th 18th

July 4th 7th 10th 15th 23rd 24th 26th 31st

Aug. 1st 9th 10th 13th 15th 17th

* singing

Merula migratoria.

Mass. (near Cambridge)

1887

* = in full song

1887,

Feb. 20th.

March 20th*

April 6th

Merula migratoria

Mass. (Winchendon)

1887

June 24th 25th 26th

" 11th 12th 13th 15th 16th 17th 18th

Not as numerous as in Middlebury Co. Found about
 equally in forest and cultivated country.

Merula migratoria.

Sept.

Oct. 4th 5thNov. 9th

1888

Feb. 7th 22ndMarch 18th 20th 24th 31st April 18th 24th 25th~~April 5th 9th 12th~~*Merula migratoria*

* = singing

Mass. (Cambridge)

Merula migratoria

1888

General arrival & first singing.

March 31

A few Robins have ventured back among the cedar-clad hills and on their hills migrants have been numerous for the past two weeks but none have appeared in Cambridge gardens before to-day when they were hopping about on the lawns in the usual familiar way. At two o'clock they were everywhere in full song for the first time this year. Winter broke only two or three days ago the snow is now nearly all gone & most of the frost out.

Mass. (Middlesex Co.)

Larus migratorius

1886

Northern migrants lingering.

Apr. 9

Although the lawns and gardens in the towns seem to be now supplied with their full quota of summer Robins I believe the northern birds have not all left us.

In the cedar woods in Belmont I found several large flocks feeding on cedar berries. I shot five and found them all very large birds in winter plumage. They also seemed immature. They were shy & acted exactly as in winter. They were especially fat the fat being white and hard, resembling lard,

In Townsend, Ashby, Mt. Watatic. — Abundant. Found all over Watatic to its very summit. In Ashby a cat belonging to Mr. Hawks had destroyed all the young robins hatched in the night before by climbing to the nests and taking out the young. The nests were all empty. Although old Robins were numerous on the mountain we did not see a single young.

Bds. Obs. near Sheffield, Berkshire
Co., Mass. June 17-26, '88. W. Faxon

75. *Merula migratoria*. AMERICAN ROBIN.—Abundant.

Auk, VI. Jan., 1889. p. 46

Birds Known to Pass Breeding Season
nr. Winchendon, Mass. Wm. Brewster

81. *Merula migratoria*.

Auk, V, Oct., 1888. p. 389

Birds of Bristol County, Mass.
F. W. Andros.

Merula migratoria (Linn.), American Robin.
Summer resident, abundant. Breeds.

O. & O., XII, Sept. 1887 p. 141

Bds. Obs. near Graylock Mt. Berkshire
Co. Mass. June 28-July 18. W. Faxon

79. *Merula migratoria*. — AMERICAN ROBIN.—Common. Frequently
seen on the mountains even to the summit of Graylock.

Auk, VI. April, 1889. p. 107

Winter Birds in South-eastern Mass. Harry G. White

11. *The Robin*. Probably no winter passes without a few Robins remaining within the State, but as their habits at that season are very different from those of other times they are seldom seen, as they keep tolerably close in the thick swamps. During the past winter they seem to have been somewhat more plenty than usual and have been reported from a number of localities. At Taunton they were only observed on one occasion, viz., on December 2d, when two were recorded. At Wood's Holl, they were observed on three days in December and on one during February, the total number being twelve. The Highland Light record, is, as usual, very complete, as they were seen on twelve days in December, two in January and seventeen in February, with a total of one hundred and fifty-nine birds for the winter months. The number seen at one time varied from one to twenty-five and averaged five.

This is another case where the actual number of individuals increases from west to east, and also of a lesser difference in the numbers of migrating birds and winter residents; than in the most western of the three counties, as demonstrated in the following table:

| Season. | Taunton. | Wood's Holl. | No. Truro |
|----------------|----------|--------------|-----------|
| Migration, | 2545 | 744 | 298 |
| Winter, | 2 | 12 | 150 |
| Approx. Ratio, | 1.1272 | 2.62 | 1.2 |

Thus, we see that the degree of plentifulness increases from east to west in times of migration and from west to east during the winter months.

O. & O. Vol. 17, June, 1892 p. 85

Brief Notes.

Edward Thayer reported that Robins were seen on Morris' Island, Chatham, Mass., Jan. 16.

O. & O. Vol. 17, Mar. 1892 p. 46

Bird Roost at "Blackbird Swamp"

Falmouth, Mass.

1895.

See acc. of Robins

July 20.

under Luscalus g. acens.

Merula migratoria

1895- Falmouth, Mass.

July 12¹/₂ 13¹/₂ 14¹/₂ 15¹/₂ 16¹/₂ 17¹/₂
 18¹/₂ 19¹/₂ 20¹/₂ 21¹/₂ 22¹/₂ 23¹/₂
 24¹/₂ 25¹/₂ 26¹/₂ 27¹/₂ 28¹/₂ 29¹/₂ 30¹/₂
 31¹/₂

Unusual Winter Records. — Owing to the unusually mild weather and frequent thaws of the past winter, a great many birds have wintered here (Cambridge, Mass.) which usually pass farther south. I have observed the following:—

American Robin. Large flocks, seen about Arlington Heights until February 1, after which date only a few were seen until the spring migration. Their chief food was the berries of the buckthorn.

Arthur C. Conney, Cambridge Mass.

Auk, XIX, July, 1902, p. 293.

Maine -

Two Robins wintering -

See Auk, XXI, 7y, 1894 p. 389.

1884

Merula migratoria
no 838, AlbinoPeterson
Mass

Summer of 1884. "This bird was
taken from a nest containing
two or three other young Robins
not quite fledged and kept for
some time the old birds feeding
them. Unfortunately the cage
fell killing the young albino
which was secured by my friend
Charles S. Fisher & afterwards
given to me. This Robin was
perfectly white with dark
eyes, the other young ones
being typical as were the
parent birds."
See note book C. R. Bernd.

Roslindale Mass.

An Albino Robin.— In a flock of about twenty Robins an albino Robin was seen in "30 Acres," Roslindale, Mass., September 22, 1910. Two days later, I saw this bird twice, feeding on Rowan berries which grew on an ornamental tree opposite my home. This time the breast of the Robin was turned towards me. The light being perfect, I felt myself fortunate. The body was pure white with the exception of a few dusky feathers on the back. A perfect "robin-red-breast" red crescent showed on the upper breast similar to the black one of our Northern Flicker. A few red feathers were sprinkled over the lower underparts. The wings were largely dusky, as were the central tail feathers, the outer ones being pure white. He looked much larger than the average Robin both in flight and when perched. This was undoubtedly an illusion due to color.—
JULIA WINGATE SHERMAN, Roslindale, Mass.

Auk 28, Jan-1911, p. 118.

A Robin which Migrated Tailless.—In the spring of 1914 a tailless male Robin arrived in the Boston Public Garden, a plump, brightly plumaged bird, and remained there as one of a breeding pair. During the weeks succeeding his arrival there was no perceptible development of a tail. On April 13, 1915, there again arrived a tailless male Robin on a morning when several females joined the company of males already present. This tailless male adopted the same limited area of the Garden as did the tailless bird of the preceding year. So the almost unavoidable conclusion was that it was the same bird, and that it was not a mere coincidence. On April 19, 1916, again a tailless male Robin arrived and again adopted the same small area of the Garden as his possession, a plump and brightly plumaged bird as before. The conclusion was then confirmed beyond reasonable doubt that it was indeed the same Robin back for the third season without a tail. This being so, the fact was that this Robin had made his migratory flights for three successive years without the aid of any tail as a rudder in flight. Neither season did any tail develop. Apparently the bird had lost the fleshy tip from which tail feathers could be developed. There was no change in its appearance, season by season. In the season of 1914 the first Robins came to the Garden on March 25 and during the next few days were joined by others. In 1915 the first Robin arrived on March 19 followed by others within a week. In 1916 the first two Robins came to the Garden on March 25, and on April 1 a dozen resident males were present. Thus it is perceived that the tailless Robin was a rather later arriving bird each season. Twenty resident Robins were already present in the Garden when he came north in 1915 and 1916. So, perhaps, this tailless Robin made his migratory flights less speedily than did others. But this supposition would seem to be not very strongly based for the reason that Robins are arriving usually throughout the month of April, and the tailless bird was not really behind time. The only conclusion to be drawn, therefore, would seem to be that the bird had experienced little or no disadvantage in flight due to not possessing a tail, or if its absence had been a disadvantage, he had effectively overcome it. We looked for this tailless Robin in the spring of 1917, but in vain; he did not come to the garden.—HORACE W. WRIGHT, *Boston, Mass.*

Auth. Vol. XXXV, 1918, p. 231.

Hartford Notes

10th, heard first Robin.—Harry T. Gates.

March

O. & O. VII. Jan. 1883 p. 8

Connecticut, June, 1893.

Murela mystatoria

June 3¹⁵ 4²⁰ - Fairfield
 " 5⁸ 6⁶ 7⁸ 8⁹ 10⁶ 11¹² 13¹³ } Saybrook
 " 15¹⁵ 16¹⁶ 17¹⁷ 18¹⁸ 19¹⁹ }
 " 20²⁰ 21²¹ 22²² 23²³ 24²⁴ 25²⁵ } Andover

with 30 above 10. It is a common bird,
 distributed as a 8. 10. 12. 14.
 noticed in 10. 12. 14. 16. 18. 20.
 the 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30.
 as a broken down specimen about
 3 ft. from the ground found
 June 23, in a wooded place at
 Andover.

Distribution of New England Birds.-
A Reply to Dr. Brewer. H.A. Purdie.

The Robin (*Turdus migratorius*), classed by Dr. B. as a summer resident of N.E., must be considered a constant resident, at least in the Southern portion.

In the "History of North American Birds," by Messrs. Baird, Brewer, and Ridgway, we find the following respecting the winter distribution of the Robin: "In the winter months it is most abundant in the Southern States, while in the Middle and even the Northern States, in favorable localities, it may be found throughout the year; its migrations being influenced more by the question of food than of climate. In the valleys among the White Mountains, where snow covers the ground from October to June, and where the cold reaches the freezing-point of mercury, flocks of Robins remain during the entire winter, attracted by the abundance of berries. In Massachusetts a few Robins remain throughout the year, but the greater proportion leave early in November, returning late in February or early in March."

Bull. N.O.C. 2, Jan., 1877, p. 14.

Distribution of New England Birds.-
A Reply to Dr. Brewer. H.A. Purdie.

Of course, after all that has been written upon the subject, I was aware that generally a species is not resident *individually* in a given section of territory. His remark respecting the Robin, that the birds found with us in winter are not the same as those that pass the summer here, but "are of a very different race," is not at all to the point at issue. As a species, I say *Turdus migratorius* is a resident of New England. If, however, as he holds, the birds found in winter are another and very different race, — as race is now understood, — he should have so indicated it in the Catalogue, perhaps as "*Turdus hyperboreus*. Arctic Robin.

Bull. N.O.C. 2, Jan., 1877, p. 12.

Birds observed in Naval Hospital
Grounds, Brooklyn, G.H. Coates

16. *Turdus migratorius*. ROBIN. — Very common; breeds.

Bull. N. O. C. 4, Jan., 1879, p. 31

Notes, Shelter Island, N. Y.
W. W. Worthington.

came on
Robins the 11th. of March.

O. & O. X, May, 1885, p. 80.

Arrivals of Mig'y Birds, Spring-1886,
Central Park, N. Y. City. A. G. Paine, Jr.

March 7, *Merula migratoria*, (761). American
Robin.

O. & O. XI, July, 1886, p. 109

Bds., Obs. at Little and Great Gull Is-
lands, N. Y. Aug. '88 B. H. Dutcher.

23. *Merula migratoria*. AMERICAN ROBIN. — While after Terns one day, on Great Gull, Chas. B. Field saw a Robin, and although I did not see the bird myself I place perfect faith in his identification. He also informed me that Robins sometimes struck the light.

Auk, VI. April, 1889, p. 131.

Cold Weather Notes, Stephentown, N. Y.
Benjamin Hoag

One belated Robin seen November 12,

O. & O. Vol. 18, April, 1893 p. 57

An Early Bird.

The old adage that "The early bird catches the worm" does not always prove true, at least not in the case about to be mentioned. On January 20th, with the thermometer ten degrees below zero, and about eight inches of frozen snow on the ground, an adult ♀ Robin put in an appearance here (Ballston Spa, N. Y.). As there are no worms to be found here at this time of the year I substituted a small charge of dust shot, with the desired result. This is the earliest record, to my knowledge, of the arrival of the Robin in Saratoga Co.

S. R. Ingersoll.

O. & O. Vol. 17, Feb. 1892 p. 29

*On the Former Abundance of Certain
Species on New York Id. (1820-50)*
Lawrence.

By the middle of October, Robins (*Merula migratoria*) were abundant, sometimes flying in flocks, but at other times they came in such numbers that they could be seen almost everywhere. They continued to be numerous for about two weeks, when the majority went south, though some would remain even into the winter. The flight was usually from the north, but on one occasion, the first great flight of that year, was from the south at the point where I was, and I never saw them in greater numbers. This was a movement that much surprised me.

When I was a schoolboy a favorite skating place was Stuyvesant's Creek, a considerable body of water, which had its head quite close to the Third Avenue, about 20th Street, and it emptied into East River—I think about 12th Street. On the north side of it, there were high woods, where I have seen Robins pursued by gunners, when the ground was covered with snow and the creek frozen.

Birds Toga Co. N. Y. Alden Loring

7. Robin. Common. Arrives here on its northern migration about the 14th of March. During the first week in May nest building commences, but I once found an industrious Robin who had her nest half built on the 5th of April. This is placed in an old shed, or in the crotch of a tree, and is composed outwardly of dried grass, weeds, mud, and is lined with dried grass. The eggs, usually four in number, are of a light blue color. During this season the male Robins can be seen, as night approaches, fighting with one another, and calling to each other from housetop to housetop. Their food consists of worms, bugs and, during the fruit season, cherries and strawberries. At this time they are of great annoyance to the farmers who put out fright tins, which fail to drive them away. About the last week in October they gather in large flocks and feed on wild cherries and mountain ash berries until the time of departure, which is less than a week.

O. 20, XV, June, 1861.

Birds of the Adirondack Region.
C. H. Merriam.

6. *Merula migratoria* (Linn.) Sw. and Rich. ROBIN. — Breeds more or less commonly throughout the Adirondacks, and is found in large flocks (often numbering over 200 individuals) in the fall, feeding upon mountain-ash berries and beechnuts.

Bull. N. O. C. 8, Oct, 1881, p. 226

NOTES ON SOME OF THE LESS HARDY WINTER RESIDENTS IN THE HUDSON RIVER VALLEY.

BY EDGAR A. MEARNS.

1. *Turdus migratorius*. ROBIN. — A rather scarce winter resident throughout the Hudson Valley; occurring at least as far north as the northern limit of the red cedar (*Juniperus virginiana*), perhaps much farther. In the Highlands sizable flocks of Robins generally remain all winter amongst the cedars, in sheltered situations, near the Hudson River. I have found them quite as common in cold as in warm winters. Very few — scarcely any — were seen during the winter of 1877-78, which was the mildest I have ever experienced. The wintering birds affect only certain favorite spots, where they subsist mainly upon the berries of the sumach (*Rhus typhina*) and red cedar.

Bull. N. O. C. 4, Jan., 1879, p. 33

*Notes on the Spring Migration of Birds in the
Northern Adirondacks [Aixton], New York [1900]*
April 16. — Occurring during the whole season.

Robin. Tolerably common.

E. A. Sterling, Brooklyn, Pa.

Bull. 1912 July, 1909, p. 209.

Winter Food of Birds in the South.
O. S. Brimley, Raleigh, N. C.

Robin, (*Merula migratoria*). While with us in October they fed chiefly on Frost Grapes, and when they next appeared in January they indulged their appetites on the same fruit until they ate them entirely and then turned their attention to Holly and Cedar berries, also those of *Ilex decidua*, a very common shrub here. Later on they turned their attention to the Sumach berries, but in March as usual took up their regular habits of eating worms and insects in the open fields everywhere.

O. & O. XII, July 1887, p. 105

Stomach Contents of Birds Collected in
Brevard Co. Florida, Between Jan. 5 &
Apr. 15 1889 F. C. Baker

761. American Robin: Palmetto berries.

J. C. Baker.

O. & O. XIV. Sept. 1889. p. 139-40.

Birds of Five-mile Beach. N. J.,
Philip Laurent.

761. American Robin (*Merula migratoria*). Common except during the breeding season, few if any remaining on the beach for purposes of nidification. Hundreds find shelter on the beach during winter.

O. & O. Vol. 17, June, 1892 p. 90

August Birds of Chilhowee Mts.
Tenn. F. W. Langdon

761. *Merula migratoria*. AMERICAN ROBIN.—While standing in the cupola of the University at Knoxville, a small Hawk, resembling the Pigeon Hawk, passed close by. Following it with the eye across an adjoining pasture, it was observed to flush a bird from a fence corner and, after a stern chase of thirty or forty yards, to seize it. A lively tussel ensued, after which the Hawk rose, heavily weighted, and took refuge in some neighboring trees. A few feathers secured at the site of the struggle have been kindly identified by Mr. Ridgway as those of a young Robin, and on these rests the admission of the species to our list, as no other specimens were observed.

Auk, 4, April, 1887, p. 133

Birds of Western North Carolina.
William Brewster.

101. *Merula migratoria*. AMERICAN ROBIN.—Irregularly but very generally distributed over the region from the lowest valleys nearly, if not quite, to the summits of the highest mountains. In the low country it was seen only in or near towns, where it had all the familiar habits of our northern bird; but on the sides and tops of the mountains it occurred miles away from any house or clearing, and in the wildest possible places. It was most numerous at Highlands, and on the Black Mountains, between 4000 and 5800 feet. Throughout the entire mountain region its song and habits seemed to be perfectly normal. A female shot May 27 was laying. This and another specimen (male, May 28) are smaller than northern examples and the throat in both is nearly immaculate.

Auk, 3, April, 1886, p. 178

Notes—Winter Birds, Milwaukee County
Wisconsin. C. A. Keeler, Berkeley, Cal.

American Robin, *Merula migratoria*. Very rare. Two were seen last winter both near the city. One was in company with a flock of Cedarbirds, and feeding, like them, on the berries of the mountain ash. They appear to be growing more acclimated to our cold winters as the years go by. In a few years they may be ranked among our common winter birds.

O. & O. XIII, Jan. 1888 p. 12

Field Notes on Birds of Colorado.
Charles F. Morrison, Ft. Lewis, Col.

Robin, (*M. migratoria*). Common; breeds abundantly everywhere. Two broods are raised, the second about the last of June or first of July.

O. & O. XI, Oct. 1886, p. 153

Birds of Southeastern Dakota, G. S.
Agersborg. Revised by W. W. Cooke

1. *Merula migratoria*. AMERICAN ROBIN.—A not very abundant summer resident. I have known it to winter here four times. A temperature of 39° below zero did not seem to drive them off. In winter they feed on the berries of *Rhus glabra* and *Symphoricarpos vulgaris*, occasionally visiting decayed trees for larvæ, cocoons, etc. Eggs ready to hatch found as early as May 1.

Auk, 2, April, 1886, p. 277
July.

Raleigh, N. C. — C. S. Brimley.

Robins have been observed in small numbers all winter, and for one week, from January 6th to 13, while the snow was on the ground, they were quite common, feeding on frost grapes and the berries of the red cedar, holly and *Ilex decidua*, in company with large numbers of bluebirds; but when the snow disappeared they also departed.

O. & O. XII, March, 1887, p. 37.

Birds of Chester County, Penn.
Cyrus B. Ressel, Ercildown, Pa.

198. *Merula migratoria* (Linn.). American Robin. Summer resident; abundant. It frequently appears in February, generally not until the first week in March. Nidificates by the third week in April; eggs, four to five; two broods. Departs by November 1.

O. & O. XIV, Sept. 1889 p. 130

7. *Merula migratoria*, (Linn.) Sw. and Rich. American Robin. Occurs regularly in large numbers along our streams; remains during the coldest weather feeding upon hackberries, wild grapes, and the fruit of the moonseed (*Menispermum canadense*) and bittersweet (*Celastrus scandens*). Some of these Robins remain until late in April, long after those which are Summer resident have begun nesting. O. & O. X. June, 1885. p. 54

LIST OF BIRDS OBSERVED AT HOUSTON, HARRIS CO., TEXAS AND VICINITY AND IN THE COUNTIES MONTGOMERY, GALVESTON AND FORD BEND.

BY H. NEHRLING.

1. *Turdus migratorius*, L. ROBIN. — Very common in the woods from November to April. Very shy and retiring during their stay; only a few have been observed in the larger gardens of Houston. Feeds abundantly on the berries of the holly (*Ilex opaca*) and the myrtle-holly (*Oreophila myrtifolia*). About the 15th of April all have departed for the North.

Bull. N. O. C. 1882 p. 6

Notes-Birds of Levy Co. Florida.
Philip Laurent.

Merula migratorius, American Robin. Very common; large flocks were always to be found feeding in the chinaberry trees. On several occasions I picked up birds under these trees that had become overpowered from over indulging in this their favorite food in Florida.

O. & O. XII, Oct. 1887 p. 159

The Robin will claim attention next. He still confines himself to the swamp and wood, where wild berries, etc., are yet abundant enough to satisfy his demands, and where he is comparatively safe from molestation by man with his destructive breech-loader. But in the course of a few weeks more, having consumed his forest supplies, Redbreast will be compelled to seek his food around the house and garden, where he will meet with death at the hand of every boy strong enough to shoulder a parlor rifle and wanton enough to touch the trigger; for he is a bird of decided stupidity and the muzzle of the sportsman's piece may be easily placed within a few feet of him before firing.

Here, Robins are nearly as numerous as the Blackbirds, of which we have spoken. When they have exhausted everything else, they visit the China tree (found in all the cities and towns in this latitude,) and feed upon the berries which it bears in superabundance. At these periods the children often catch them on the ground, where they have fallen, intoxicated by the berry aforementioned. Late one afternoon last spring, I picked up a Robin thus intoxicated that had dropped from a tree near by and was fluttering along in a limp and helpless manner. Having carried the bird home, I put it in a box for the night and next morning turned it loose, when it flew away as easily and soberly as any of its fellows could have done.

It is not, however, the scope and purpose of this article to go minutely into the nature of the Robin; and as I have mentioned the most conspicuous of his winter habits, I will now dismiss him.—W. B. H., Smithville, Ga. O. & O. IX, May, 1884, p. 54.

7. *Merula migratoria*, (Linn.) Sw. and Rich. American Robin. Occurs regularly in large numbers along our streams; remains during the coldest weather feeding upon hackberries, wild grapes, and the fruit of the moonseed (*Menispermum canadense*) and bittersweet (*Celastrus scandens*.) Some of these Robins remain until late in April, long after those which are Summer resident have begun nesting. O. & O. X. June. 1885. p. 54

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Bull. N. O. O., 7, Jan., 1882. p. 6

The Robin will claim attention next. He still confines himself to the swamp and wood, where wild berries, etc., are yet abundant enough to satisfy his demands, and where he is comparatively safe from molestation by man with his destructive breech-loader. But in the course of a few weeks more, having consumed his forest supplies, Redbreast will be compelled to seek his food around the house and garden, where he will meet with death at the hand of every boy strong enough to shoulder a parlor rifle and wanton enough to touch the trigger; for he is a bird of decided stupidity and the muzzle of the sportsman's piece may be easily placed within a few feet of him before firing.

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A. J. 1882

Signed:

HOUSTON & TEXAS CENTRAL RAILWAY COMPANY.

ACCOUNTING OFFICE.

BENJAMIN G. CLARKE
AND
CHARLES DILLINGHAM, JR.

Houston, Texas May 10, 1886

Prof. Alpheus Hyatt
Supt. Boston Society of Nat. Hist.
Dear Sir

In reply to your note to Dr. Catting, of Boston, referred to Mrs. Newell, and by her forwarded to me, expressing a desire "to receive some account, from the person who sent Mrs. Newell the specimens, of how the Robins said to get drunk on the fruit of the tree really deposit themselves," I have to say that I have seen a flock of Robins in the China trees eating berries; and I have seen them, after eating some time, fall to the ground or make vain attempts to fly. I have, when a

scope and pur-
nately into the
s I have men-
s of his winter
him.—W. B.
IX, May, 1884, p. 54.

Wille Georgia.

ill claim attention next.
s himself to the swamp
wild berries, etc., are yet
to satisfy his demands,
comparatively safe from
nan with his destructive
But in the course of a few
ing consumed his forest
ast will be compelled to
round the house and gar-
ill meet with death at the
y strong enough to shoul-
le and wanton enough to
r; for he is a bird of de-
and the muzzle of the
e may be easily placed
et of him before firing.
i numerous as
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ed everything
e (found in all
latitude,) and
ch it bears in
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xicated by the
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g a Robin thus
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for the night
loose, when it
verly as any of

Subject.....

HOUSTON & TEXAS CENTRAL RAILWAY COMPANY.

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BENJAMIN G. CLARKE }
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CHARLES DILLINGHAM }

Houston, Texas.

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A O 10-1,

188

boy, picked them up after they had
—thus fallen, and on such occasions
have had ~~my~~ fingers pecked by
them. I have conversed with other
persons who have observed the fact
of the Robins falling from the chin-
trees upon eating the berries.
I have never, however, persevered
in any systematic series of observa-
tions to ascertain whether the
identical birds will return for
the same purpose after once having
indulged a desire for berries
with the results aforesaid

Yours truly

Emmitt B Allen

Kindness of Mrs. Newell

cope and pur-
utely into the
s I have men-
s of his winter
him.—W. B.
IX, May, 1884, p. 54.

Correspondence.

Editor O. & O:

I have just received by mail from Bridge-water, Lunenburg Co., Nova Scotia, a very fine Albino Robin. The bird is pure white on the head, back and half the tail, the four feathers on one side of the tail being black, the breast is a faint red, the wings white. The bird is a male and the man who shot it says it had the note of the robin. I once had an Albino Robin taken when about three weeks old. It was fully feathered, but not able to fly far. The bird was alive when brought to me, and was all of a creamy white.

J. E. Egan.

Halifax, N. S. Oct. 28. 1888.

O. & O. XIV. Dec. 1889. p. 188.

Albino Robins (*Turdus migratorius*).—My friend James M. LeMoine, Esq., informs me that he has just added to his fine collection at Spencer Grange, Quebec, a pure white Robin, said to be the first seen in that vicinity. I have lately examined an albino of this species recently captured near St. John. The only colored feathers to be seen on the bird are three single ones forming spots on the breast.—MONTAGUE CHAMBERLAIN, *St. John, N. B.* **Auk**, 2, Jan., 1885, p. 102.

ALBINO ROBIN. Oct. 21, '85, I had a white Robin sent to me. It had the red breast, but all the other parts were white, tinged with yellow above.—Chas. L. Phillips, *Dighton, Mass.*

O. & O. XI. Jan. 1886. p. 16

ALBINO ROBIN. Oct. 21, '85, I had a white Robin sent to me. It had the red breast, but all the other parts were white, tinged with yellow above.—Chas. L. Phillips, *Dighton, Mass.*

O. & O. XI. Jan. 1886. p. 16

Migratory Thrush (Robin).—Taken at Marlboro, Mass., May, '88. Pure white, excepting one tail feather which is very dark, and a few scattered brownish markings.

O. & O. XIII. Aug. 1888 p. 124

Brief Notes.

Monson, Mass.—

I received on April 20 an Albino Robin.

O. & O. Vol. 18, May. 1893 p. 78 C. H. Aud.

E. W. Norcross, of Boston, while on his vacation in Vermont, shot a beautiful white Robin. It seemed to have been deserted by its family and was flying about the fields alone.

Brewster.

O. & O. Vol. 18, Sept. 1893 p. 132

Albinism and Melanism in North American Birds. Ruthven Deane.

Among the *Turdidae*, the Robin (*T. migratorius*), is the only species I have seen in the albino state, and in my experience is the most common example among our birds, though we rarely hear of pure white specimens, and out of some twenty I have seen, there were not any two that resembled each other.

Bull. N. O. C. 1, April, 1876, p. 21

MELANISM OF *TURDUS MIGRATORIUS*.—Another* case of this affection, much less frequent (except in *Falconidae*) than leucism, comes to my knowledge through the attention of Mr. G. A. Boardman, who desires me to make a note of it for the "Bulletin." The young Robin, "as black as a Grackle," is still living in Mr. Boardman's possession. About two months ago this ornithologist heard of a nest of black Robins being taken at St. John's, and wrote to the owner or collector about it. The person, however, lost his life in the great fire which occurred there, and Mr. Boardman, not liking to trouble the family by writing under such circumstances, went to St. John's and inquired about the black Robins. The story proved true, and one of the birds was purchased. "When I first got the bird," writes Mr. Boardman, "he was in pretty good plumage, but his feathers are now half out, and I am hoping that he will not disappoint me by coming out red. Most of the feathers on his head and neck are new, I think, and jet black. His tail is now gone, but that was pure black too.

I see no signs of the normal plumage." Mr. Boardman writes me later, under date of September 23, that he has been much interested in watching the moult of the black Robin, and says, "He acts as if he were going to be an albino. His new tail is about half grown out, and is nearly white, with a black stripe down each feather. His breast, head, neck, and back are jet black, but very much out of feather. He would now make a funny specimen,—part albinic, part melanistic." The parents of these young were not peculiar in color.—ELLIOTT COVES, *Washington, D. C.*

[NOTE (December 15, 1877). Since this paragraph was penned, the bird has been killed, stuffed, and sent to the Smithsonian, where I have seen it. It is black, with white wings and tail.—E. C.]

Bull. N.O.C. 3, Jan., 1878, p. 46-47.

Abnormal Coloration in a Caged Robin.—In an account of an abnormally colored Robin given in 'The Auk' for January, 1884, p. 90, mention was made of the softness of the bones. Such of these as were not necessary to the proper make-up of the skin were submitted to a careful chemical analysis under the direction of Prof. W. O. Atwater, of Wesleyan University, who found them to contain only about 25 per cent of mineral matter, or about one-third the amount usually found in the bones of normal, healthy birds.—W. B. BARROWS, *Middletown, Conn.*

Auk, 2, July, 1885, p. 303.

Abnormal Coloration in a Caged Robin.—Through the kindness of its owner, Mr. A. R. Crittenden, I have recently examined a caged Robin (*Turdus migratorius*) which is now in peculiar plumage, and which has a somewhat unusual history. When taken from the nest, about six years ago, it was perfectly normal in color of plumage, and so remained for two years. It has moulted once a year, in early autumn. After the fourth moult a few white feathers were noticed, and here and there a black one, but it was not until the following year—after the fifth moult—that the change was marked. The bird then appeared with wings and tail almost completely white, while below he was clear black, except for a side patch of red under each wing, and the usual white belly. The following winter (last winter), he came out in perfectly normal plumage, though Mr. Crittenden thinks the colors were unusually rich.

This winter, again, the abnormal dress has been assumed, but varying somewhat in detail. He now appears as follows: Above clear black; tail mostly white; interscapulars and most of the wing-feathers white on outer webs; chin, throat, belly, and under-tail coverts normal. The upper breast shows a somewhat crescent-shaped patch of red, and almost as continuations of this on either side are red patches under the wings. A few red feathers down the middle of the breast imperfectly separate the black which would otherwise form a single large pectoral patch. The white about the eyes is normal. The bird is a male, apparently in perfect health, and with a voracious appetite. His food has been principally one part prepared Mocking-bird food to three parts Indian meal, the whole mixed together with a teaspoonful of melted lard. In addition to this he has had only a little fruit and a few insects, mostly house-flies.—W. B. BARROWS, *Middletown, Conn.*

[Two previous instances of melanism in the Robin have been recorded in the 'Bulletin of the Nuttall Ornithological Club' (Vol. I, p. 24; Vol. III, p. 47).—EDD.]

Auk, I, Jan., 1884, p. 90.

Another Black Robin.—While looking at the birds in an aviary in Somerville, Mass., a few days since, I noticed an American Robin as dark as a European Blackbird, for which I took it until the owner informed me that it was our Robin taken from the nest, in this neighborhood, by himself. He told me that Robins thus raised in confinement were often thus colored. Is not the melanism to be connected with the peculiar conditions to which the bird is exposed? The aviary is built like a greenhouse, with one side (glass) sloping to the south. It has no artificial heat therein, yet keeps southern birds (as Cardinal Grosbeaks) in good condition. The Robins get no worms except those they may pick up in the aviary.—WALTER FAXON, *Cambridge, Mass.* Ank, 3, April, 1886, p. 284.

Another Black Robin.—Some time ago I heard of a second 'Black Robin,' and tried to find out the facts with regard to it, but failed to get anything definite until to-day, when, by mere chance, I met the owner of the abnormal bird and obtained from him the following facts about it. The bird was taken from the nest here in Middletown while in the ordinary first plumage, and for "two or three years" was like any other caged Robin. The owner, Mr. H. S. Leonard, seemed principally struck with the tremendous appetite of the bird, which he assured me ate "as much as a goose" every day. Gradually the plumage became somewhat variegated with black and white, the black predominating above, though Mr. Leonard thinks the bird became ultimately almost white.

There was no return to the normal plumage after the abnormal dress was once assumed; but the bird, which proved to be a female, always seemed in perfect health and laid several sets of eggs while in captivity, of course hatching none. She, however, adopted any young bird, of whatever species, put into her cage, and in every case reared the young birds successfully. She died when about five years old, through the carelessness of the person left to feed her. Unfortunately her skin was not preserved. The food was varied as much as possible, consisting largely of insects, worms, fruit, etc., in summer, with a large proportion of meat, bread, etc., in winter.—W. B. BARROWS, *Middletown, Conn.*

Ank, 2, July, 1886, p. 303.

Albinism and Melanism in North American Birds, Ruthven Deane.

Another abnormal state (Melanism), in which our birds have been found, is of exceedingly rare occurrence, and but five species have been recorded on my list:—*Turdus migratorius*.

Bull. N. O. C., 1, April, 1876, p. 24

MELANISTIC PLUMAGE OF ROBIN.—I recently secured a Robin which showed decided traces of melanism, the feathers of the back possessing the ebony brilliancy of the Purple Grackle.—S. J. Leonard, *Utica, N. Y.*

O. & O. XI. May, 1886, p. 77.

W. G. Emerson

Only one case of "Melanism" has come under my notice, and for a long time I could not make it out, until I asked Mr. W. G. Blunt, of San Francisco, whose collection it was in, what kind of a robin he called that black fellow? He said it had been sent him from the mountains, as something new in the bird line. It proved to be a Redbreast (*M. migratoria propinqua*), decked out in a crow's suit of black, and truly, he looked like a masquerader, his own brother would not have known him. The plumage shone with a jet richness, and only bill and eye showed him "Robin of old." Let us hear from other collections.

O. & O. XIII. June, 1888, p. 82-83.

A BLACK ROBIN (*Turdus migratorius*).—I have been greatly interested in a case of melanism,—a black Robin. The color is very decided, and covers the entire bird, with a very trifling exception. The lower mandible is yellow, but its upper one is black. I noted three specks on the breast, of the normal mahogany-red; but all put into one would not make an area of more than a quarter of an inch. The bird is lively, thrives in confinement, is a male, and was taken from a nest in Freehold, New Jersey, this last summer. There was but one other bird in the nest, also a male, which was normally colored.—SAMUEL LOCKWOOD, *Freehold, N. J.* [For another case of this affection of the same bird, see this Bulletin, Vol. III, p. 47; Forest and Stream, Vol. XIII, Aug. 7, 1879, p. 525.—E. C.] Bull. N. O. C. 5, Jan., 1880, p. 46.

Editor O. & O.:

Through the kindness of Mr. William Thompson at 383 Washington St., Boston, I was shown a very beautiful partial albino specimen of our common Robin (*Merula migratoria*). It was shot at Farmington, Me., from a flock of normal colored birds of the same kind about Nov. 1st of last year (1889) by Mr. Alexander Forsythe, a resident of the above place. To describe the bird roughly I might say, breast, mottled-white and reddish-brown; throat, primaries, secondaries and central tail feathers, white, the entire upper surface with this exception, of a very light chocolate color.

Partial albinos of our well-known Robin are not of rare occurrence, and from my experience occur as often in this species as in any other, yet it strikes me such freaks of nature are worth recording. *Shelley W. Denton.*

Wellesley, Mass.

O. & O. XV, Mar. 1890 p. 48

ALBINO ROBINS. *Howard Duckane, Glascow, N. Y.*, writes: "To-day I saw an Albino-Robin. For three seasons back this same Robin, (I suppose it to be the same) has been with us." A lady friend recently mentioned to us that she had noticed when visiting at New London, Conn., an Albino Robin, which had an Albino mate—the latter not so white as the other. It would be very interesting to know whether their progeny show white feathers also.

O. & O. IX, Jun. 1884, p. 76.

Rev. C. M. Jones of Eastford, Conn., secured August 2d a pure albino robin, probably a bird of this present year.

O. & O. XII, Aug. 1837 p. 137.

ALBINO ROBIN. A neighbor of mine has in confinement a robin, pure white, pink eyes. It was raised from the nest and has never had any stage of plumage save the white. Perhaps the reason of this plumage could be traced to deficiency in the egg.—*D. F. L.*

O. & O. XI, July, 1886, p. 107

Albino Robin at Grand Rapids.

BY GEO. C. HOLLISTER.

On the 1st of September my father was attracted by a bird that looked like a Robin, except it had a white head. The next day I saw the same bird feeding on the ground with other Robins. After I shot him I found that it evidently was a young bird, as the feathers on the upper parts of the neck were not fully developed.

The following is the description: Crown pure white, hind head and nape white with a few black feathers scattered about, the greater number being over the right eye, edge of eyelids yellow surrounded with white, a very indistinct black superciliary streak, throat and sides of head with a few black feathers, the shoulders also have a few white feathers and there are two more in the back, the first secondary of the wing is white, though the corresponding feathers of the wing are dark. Otherwise it is the same as any other Robin.

O. & O. XIV, Aug. 1888 p. 118

Brief Notes.

A pure white Robin was shot April 11 by H. O. Butterfield at Stafford Springs, Conn.

O. & O. Vol. 17, May 1892 p. 79

Maine Bird Notes.

In a flock of fifteen or twenty Robins (*Merula migratoria*) that has been about our neighborhood for the last few weeks is a handsome albino. The upper parts, except the breast, are entirely white, allowing for a tinge suggestive of not being quite clean; but the tail shows some dark feathers underneath. The breast is lighter than usual, a flesh color on the sides with a deeper shade through the center, and the bill seems very yellow in contrast to the white plumage. It is both surprising and amusing to see it run along and hop, hop, hop as every Robin does while seeking his food on the ground and to mark the twitch of tail and alarm note of *tut, tut!* as it flies up to a near by tree.

Abby F. C. Bates, Waterville, Maine.
Auk, XVIII, Oct., 1901, p. 401.

1642. *Bird Music*. By Simeon Pease Cheney. *Ibid.*, Vol. XXXV, No. 6, April, 1888, pp. 845-848 (*Stalia sialis* and *Merula migratoria*); *ibid.*, Vol. XXXVI, No. 1, May, 1888, pp. 147-149 (Partridge and Owls); *ibid.*, No. 2, June, 1888, pp. 254-256 (*Icterus galbula*, *Turdus mustelinus*, *T. a. pallasi*, *T. fuscescens*); *ibid.*, No. 3, July, 1888, pp. 416-417 (*Melospiza fasciata*, *Spizella pusilla*); *ibid.*, No. 5, Sept., 1888, pp. 718-719 (*Icteria virens*, *Dolichonyx oryzivorus*, *Anthus vociferus*); *ibid.*, Vol. XXXVII, No. 1, Nov., 1888, p. 97 (*Urinator imber*); *ibid.*, Vol. XXXVIII, No. 2, June, 1889, pp. 234-235 (*Sturnella magna*, *Pipilo erythrophthalmus*, *Piranga erythromelas*, *Spinus tristis*). — With musical notation of songs.

A STUDY OF THE SINGING OF OUR BIRDS.*

BY EUGENE P. BICKNELL.

CONSIDERATION OF SPECIES.

Turdus migratorius. ROBIN.

As a general rule our summer song-birds come to us in the spring in full voice; but an exception is often made by the Robin. As a few Robins may be with us all winter, it is not always easy to tell just when the first spring birds come; but the observations of several years clearly show that, as a rule, first arrivals are songless. But singing is rarely delayed after the migration has well begun; and when this has been retarded by untoward weather, and finally starts with full volume, then the advance guard are usually song-bearers. My records show a range of over three weeks in the time of the beginning of song in different years, from February 27 to March 21. Both of these dates are, however, exceptional, and represent the extremes of an early and late season. Usually singing begins during the second week of March.

The Robin continues well in song up to the middle of July, after which there is usually a perceptible decrease in the number of singing birds, and the time of singing becomes more restricted to the marginal hours of the day. My notes of the singing of the Robin in August, though usually extending through the month, rarely form more than a disconnected record. The inclination towards song is now declining, and it depends, during the first part of the month largely, and during the latter part entirely upon favorable conditions, whether there be any song at all. Thus in a season of drought occasional brief songs in the early hours on favorable days, with intervals of silence, may fill out the record of the month, whereas a reasonably consecutive record will result from a cool and wet season.

September is eminently their month of silence. Their primary song-period may extend feebly beyond the end of August, and rarely an imperfect song may be heard in the following month, but until its latter days silence, excepting the ordinary call notes, is the general rule.

The secondary song-period is introduced with much regularity in different years in the last days of September. From 1878-81, my record runs: September 27, 26, 28, 25. But unfavorable weather may postpone the beginning of the second song-period until October. The first songs are usually subdued and broken, but soon acquire the normal character, and sometimes continue with little interruption through the month of October; but again there may be an almost complete intermission between the first or second and final week of the month. Sometimes when this is the case, multitudes of the birds arrive from the north about the third quarter of the month, bringing song with them, and in the last week, if the weather be damp and cloudy, numbers may be heard singing with almost the freshness and vigor which characterizes their song in April.

When the vast numbers of Robins which pass southward at this season have departed, the species rapidly becomes uncommon. Dates of last songs fall between October 21 and November 1. In two years I have no record later than the 8th, but it seems not unlikely that in these years transient final days of song were missed. It is, however, not improbable that, if subsequent to the beginning of autumn song the weather should prove unfavorable, the second song-period may be allowed to lapse.

Through the latter part of August many Robins may be seen flying about, minus remiges and rectrices, in varying number. Adults of both sexes taken in the second week of October have the new plumage perfected with the exception of some of the smaller feathers.

ACK, I, April, 1884, p. 126-128

While in Nova Scotia the past summer I saw and heard a Robin singing in a strain unlike anything I had ever listened to from a Robin before. There was, it is true, the unmistakable Robin song, but it was strangely wild and glorified. There, too, was the bird, only of darker head and ruddier breast it seemed, as befitted this exceptional singer. Some writer — perhaps Mr. Torrey — has told us of local differences in voice in the case of the familiar *Merula migratoria*. May there not be still greater differences among individuals of certain forms? Baltimore Orioles may be cited as an instance in favor of this view.

G. S. MEAD.

San Francisco, Cal.,
August 18, 1900.

ACK, VOL. XXXV, NO. 1, 1903.

Habit of the young, and notes on Variability of Birds' Songs.

A few days ago I was shown by Mr. J. W. Morrison the nest, or nests rather of a pair of Robins, *Merula migratorius*, (new version,) built on a window cap under the peak of the roof of a house. Mr. Morrison says that on May 28th the first brood of young were hatched and the parents at once began to build a new nest immediately above the first. A second complement of eggs were deposited and hatched out, and for the third time the birds proceeded to build, selecting for the site of their new home an adjacent tree. The nest was completed here, but the old birds were so bothered by their youngsters that they finally abandoned this nest in the tree and returned to their old stand under the peak and put their fourth nest on the top of the two already there, and from this third story they brought out their brood.

—Montague Chamberlain, Saint Johns, N. B. O. & O. VII. May, 1882, p. 111-120

ROBIN. (*Merula migratoria*).—Nest and five eggs. Collector D. Duncan, Vinal Haven, Me., June, 3d, 1879; fresh. Suggested by your editorial in July number.

O. & O. VII. Oct. 1882, p. 167

SPOTTED ROBIN'S EGGS. I recently found a robin's nest containing four eggs. Each egg was spotted with fine, pale brown spots, some of the largest the size of a pin's head. I have been collecting nine years and have never seen any robin's eggs before that were spotted. F. A. Lovejoy, Hollis, N. H.

O. & O. IX, Jun. 1884, p. 76.

Notes from Taftsville, Vt.

In 1882 I found a set of five Robin's eggs, it being the only set of five that I have found.—C. O. Tracy, Taftsville, Vt.

O. & O. IX, Feb. 1884, p. 17

Notes from Taftsville, Vt. Aug. 6.

Four feet from the Cuckoo's nest was a Robin's nest containing four eggs.

C. O. Tracy, Taftsville, Vt.

O. & O. IX, Feb. 1884, p. 17

Several correspondents of the O. and O. mention that they have found spotted Robins' eggs. These statements remind me that twelve or fourteen years ago I found a Robin's nest containing four eggs marked with fine brown spots. In those youthful days the art of blowing eggs and keeping them in sets was unknown to me. The single egg which I took is now extant and shows the markings distinctly.

Notes from Taftsville, Vt.

O. & O. IX, Sept. 1884, p. 109

ROBINS' EGGS, SPOTTED.—My friend, Mr. Oliver Lockhart, of Lake George, early in June, found a Robin (*Turdus migratorius*) building in a pine-tree near his house. When the nest was completed, and the bird had laid her eggs, he was surprised to find them spotted. One, which he kindly sent me, was marked very much like a Scarlet Tanager's (*Pyrausta rubra*) egg, the greater number of spots being at the larger end; the rest of it was sparingly spotted; otherwise it was a normal Robin's egg.—A. K. FISHER, Sing Sing, N. Y. Bull. N. O. C. 3, April, 1878, p. 97

SPOTTED ROBIN'S EGGS. (Robt. W. Wilds, Syracuse, N. Y.) Spotted Robins' Eggs are by no means rare, and have frequently been referred to in our columns.

SPOTTED ROBIN'S EGGS.—Robert Linton, Pine Bend, Minn., and J. P. Loose, Hagerstown, Md., write us that they have found sets of Spotted Robin's Eggs. O. & O. IX, July, 1884, p. 90.

PERSISTENCY IN NEST-BUILDING BY A PAIR OF CITY ROBINS.—Mr. H. H. Clark of this city has kindly placed at my disposal some very interesting observations made by him last season relative to the perseverance displayed by a pair of Robins (*Turdus migratorius*) at nest-making under difficulties. A pair of these birds selected for a nesting-site a place in his garden so frequented by cats—the great enemy of town-breeding birds—that it seemed certain the young, if not, indeed, the mother-bird, would be destroyed by them if the birds were allowed to build in the place they had chosen. So, in order to avoid the threatened danger to the brood, as well as the pain of witnessing their destruction, Mr. Clark resolved to intercept their work, hoping thereby to force them to choose a safer nesting-place. He accordingly pulled down their partly formed nest. The next morning there was a great outcry from the birds over their loss, and no little commotion among the other Robins of the neighborhood. To his surprise the birds immediately set to work to rebuild the nest, aided by several of their sympathizing neighbors, who brought materials faster than the architect seemed able to properly bestow them, so that in a single morning considerable progress was made with the new structure. The next morning the birds found their nest had been again destroyed. Not a whit discouraged, they resumed their labors, building again in the same spot as before, but this time without help. The nest was now constructed with greater care, being securely fastened by strings passed round the branch on which it rested, which were also carried up and made fast to a limb above. These precautions availed them nothing, for this nest shared the fate of the others. An act begun in a spirit of kindness toward the birds was now continued in the interest of scientific investigation. A fourth time the persistent birds rebuilt their nest at the same spot, with to them the same sad result. For the fifth time they began to rebuild the nest; this was too much for my informant's feelings to resist, and he resolved to let them carry out their plans. To his surprise, however, they soon began to destroy the structure themselves, taking the materials to a branch higher up, as if divining not only the source of their troubles, but the reason that had prompted the repeated removal of their nest; but after a morning's work the nest was abandoned, and another site for it was selected some rods away in a safer position. Here again, however, they later came to grief, their eggs being taken by a ruthless boy, an habitual robber of bird's-nests.

The interesting points here brought out are the tenacity with which this pair of Robins adhered to their chosen nesting-place; the concerted action of their sympathizing neighbors in aiding them at first to rebuild; the later greater care they displayed in more firmly attaching the nest to its resting-place; and finally the apparently intelligent recognition of the source and cause of their troubles, and voluntary choice of a safer location.

—J. A. ALLEN, Cambridge, Mass. *Bull.* N. O. C. 3, April, 1878, p. 103-4.

CURIOUS NESTING.—May 6, while out collecting with a companion, we stopped at a spring for a refreshing drink, for the day was very warm. All at once we were attracted by a rustling overhead and imagine our surprise to see a Robin, (*M. migratorius*), flying out of a large knot hole in an oak tree which was near at hand. Hastily climbing we found a nest in the hole, loosely put together, which contained four fresh eggs.

H. W. Andrews, Taunton, Mass.

O. & O. IX, Dec. 1884, p. 157.

Curious Nesting Place.
Ernest B. Thompson, Hamilton, Ont.

Another case was that of a robin that was sitting on eggs underneath the flooring of an overhead railway bridge, with the trains constantly passing. I was unable to see the result in this case.

O. & O. XIV, May, 1889 p. 77

Brief Notes.

July 4th in the basement of an old shop among the floor timber I found a Robin's nest containing four young birds. On an offer of fifty cents apiece, I have the young fellows of the neighborhood on the rampage after Bat's eggs. Rufus H. Carr.

Brockton, Mass.

O. & O. Vol. 18, July, 1893 p. 107

The Number of Eggs Laid by the Robin.

BY SHELLY W. DENTON, WELLESLEY, MASS.

As to the number of eggs a Robin (*Merula migratoria*) lays, I would state that a young man who has collected many eggs brought a Robin's nest one day containing seven eggs. I was rather doubtful in my own mind as to his honesty in this case, although I had never had reason to previously doubt his veracity. About two weeks later, in a swamp of low bushes and trees close to Charles River, I found a Robin's nest placed in a pine tree near the end of a low branch, containing six eggs, while immediately under the nest was the seventh egg, whole and unbroken lying on the leaves with which the ground was carpeted. On this seventh egg were three small snails, or "slugs" as we commonly call them, that is, the kind without a house on its back. On removing these slugs

from the egg I noticed that wherever they had attached themselves to the egg, the egg was pure white, the slugs having absorbed all the coloring matter from the shell.

Here was a nest containing six eggs, about which there could be no question; as to whether they were all laid by one bird it is impossible to say. Of course, one can imagine many ways in which the nest came to have so many eggs, but I am quite certain that in this case it was not caused by the interference of human beings, it being in a wild and secluded spot seldom visited.

Returning to the snail question, I would like to ask what substance is it with which the slug seems provided that will take the color from a Robin's egg, when with soap we cannot wash it off? O. & O. XII, Mar 1887. p. 44-45

I found a Robin's nest built on ground or edge of rock in this place, and since I reported my nest of seven eggs. A collector found one of six and several of five at Peace Dale, R. I. The nest of six was brought me, but none of the five sets, as my friend was not aware they were uncommon. After taking the six eggs the bird layed two more and then deserted nest.

Snowdon Harland
O. & O. VII, Jan 1883, p. 8

1888

Robin

S. W. Denton.

May 10. Mr. Bowles of Cambridge picked up a Robin's egg under an English Sparrow's nest this A.M. with a hole picked into one side of it and most of the contents eaten. No Robin's nest near. Undoubtedly done by English Sparrow who must have brought the egg home, distance. Mr. Bowles showed me the egg which had a clear cut hole on one side as large around as a pencil.

1888

Merula migratoria

Wellesley, Mass.

May. 8, 3 eggs. 7, 4 eggs. 12, 3 eggs. 23, many nests.

25.

The English Sparrows have persecuted these birds so, they have taken to the woods to find their nests 40 ft high (newly made) in pines, in heavy woods.

1889. Apr. 26. nest building May 5, 7 eggs. 9. one seen repairing nest.

S. W. Denton.

On the 15th of June, I found a nest of Robins, (*Turdus migratorius*), containing five eggs, the only one I ever saw except the one found by Mr. C. O. Tracy of Taftville, Vt.—

F. M. Goodwin.

Harland, Conn. Notes

O. & O. IX. Mar. 1884. p. 36.

Nest Building.

BY HON. JOHN N. CLARK, SAYBROOK, CONN.

I have observed that in the case of most birds the nest is fashioned after a stereotyped pattern. The Robin builds her mud walls just about so thick and so high, so deep and so wide, and just about so much of that soft brown grass is platted together as lining.

Am. Ornithologist, 2, 141.

Bird destruction *D. D. Stone*

Last year a Robin's nest containing eggs was brought to me by one of my cousins. He found it in his hop yard, in a slight depression of the ground and about a foot from a hop pole. This spring my attention was called to another Robin's nest, with eggs, on the ground at the foot of a small apple tree. I have heard of two others on the ground this year, but did not see them.—*D. D. Stone*.

O. & O. XI, Nov. 1886, p. 176

Notes—Eggs of Thrushes & Thrashers. *H. G. Parker.*

American Robin (*Merula migratoria*). The number of eggs laid is generally four, though the writer has been especially fortunate once, in finding sets of five and six. Whether these extreme sets were deposited by one female each, it is impossible to say. Such cases are exceptional and establish nothing. The eggs are greenish blue, normally unspotted; in size averaging 1.18 x .81. During the season just passed (1886) every Robin's nest encountered was looked into, in the hope, maybe, of finding those spotted eggs of which we occasionally hear. This peculiar phase was not met with, but it is a fact worthy of mention that in only one instance, in probably fifty, was more than three eggs seen. The writer's experience in this respect was not unique, and conversation with a number of observers confirms this strange phenomena. A long set average 1.25 x .80; a short set average 1.05 x .86.

O. & O. XII, May, 1887 p. 70

A Robin's Nest without Mud.—In the Summer of 1900 or 1901 I noted a Robin on Boston Common building a nest on a linden. No mud was then accessible anywhere on the Common and the Robin had apparently put no mud into this nest. It appeared to be built wholly of the dry trash used by English Sparrows in nest-building. It was some 25 feet up from the ground and could not be closely examined but from all points of view, in bulk and shapelessness as well as in material, it presented the appearance of an English Sparrow's nest of average or a trifle less than average size. If I had not watched the Robin in building it I should have called it an English Sparrow's nest, without hesitation. When first seen, the nest was nearly finished.—*FLETCHER Osgood, Chelsea, Mass.*

Auk, XXIII, Dec., 1900, p. 464.

CURIOUS NESTING PLACES.—In the Spring of 1878, I found a Robin's nest on a rock and level with the ground. There was scarcely any attempt at a nest, simply a few weeds around the edge, and the eggs laid on the bare rock. Still, the bird was as noisy at my presence, as if she were defending a much more elaborate structure. *W. H. Northampton, Shelter Island, New York. O. & O. VII. Jul. 1882. p. 18*

Last year a Robin's nest containing eggs was brought to me by one of my cousins. He found it in his hop yard, in a slight depression of the ground, and about a foot from a hop pole. This spring my attention was called to another Robin's nest, with eggs, on the ground at the foot of a small apple tree. I have heard of two others on the ground this year, but did not see them.—*D. D. Stone.*

O. & O. Vol. II, No. 11, Nov. 1886, p. 176.

As we passed the town of Waconia I noticed a female Robin sitting on the nest built on a protruding stick of a woodpile, but this is no more odd than their building under the eaves of a house and on the top of a small stump, having seen nests in both situations.

*Lac. qui. park Co. Minn. J. C. Santwell
O. & O. XIV. Oct. 1889. p. 152.*

*Notes—Deeress County, Mich.
Samuel Spicer. Goodrich, Mich.*
CURIOUS FREAK OF A ROBIN.—In the Spring of 1888, while I was building a tool-house, a pair of robins located a site for a nest on one of the girths and had nearly finished it when it was accidentally knocked down, whereupon they immediately began building on the purlin plate and continued their work until they had twelve nests under way in all stages of completion, from a mere beginning to the finished nest (three of them being completed), when the female was shot by some boys, which ended their nest building.

Samuel Spicer.

Goodrich, Mich.

O. & O. XIV. Mar. 1889 p. 43

*Birds of Carroll County, Ind
B. W. Eversmann.*

202. *Merula migratoria*. AMERICAN ROBIN.—One of our commonest and best known summer residents,—leaving so late in the autumn and returning so early in the spring as to almost appear a permanent resident. Our January or February 'thaw' seldom fails to bring a few back to us. I desire to call attention to a nesting habit of the Robin which is spoken of in the books as "unusual," that is the habit of constructing their nest upon a rail in the fence. This I have from childhood noticed to be a very common place for the Robin to put its nest. A place near the end of the rail where it is crossed by those of the next panel is usually selected, and generally about the fifth from the ground in an eight-rail fence. I have frequently known the same old nest to be repaired and used for two or even three years.

*A. Pleasant Price.
Geo. L. Toppan.*

In looking back over my varied experiences affield I fail to recall one which gave me more real pleasure than the one short hour whose principal occurrences I have tried to outline above.

While travelling through Iowa this spring I several times found nests of the Robin (*Merula migratoria*) placed on top of the oil box of eight cars. They were placed between the wheel and the equalizer. At the same time I also found several placed on the floor timbers of the car. These nests contained eggs in some instances. Most of the cars had been side tracked for some time and to this fact, as well as to the scarcity of trees in that country, I attributed the choice of so unusual a nesting place.

Geo. L. Toppan.

O. & O. XIV. Nov. 1889 p. 136

Birds at Twin Lakes, Cal. W. H. S. J.

1. *Turdus migratorius*. ROBIN.—Very common at the level of the Lakes. Begins to breed about June 5. The breasts of the males are more tawny, and the general coloring lighter, than in individuals from the Eastern States. Young fully fledged were observed June 29. All the nests found are curiously built of sage-brush, and the "mud walls" were not prominent.

Bull N. O. C. 4, April, 1870. p. 91

HOUSE WRENS HEARD BY ROBINS.—On June 11th, 1884, I found a Robin's nest in an Apple tree. On gaining the nest I saw five little heads sticking up, the possessors of two of which were Robins, but the other three, which were not half as large as the Robins, I did not recognize. There was also a Robin's egg in the nest.

I visited it again two days afterwards, when the remaining egg was hatched, making six young ones—quite a nest full. By the 18th the three Robins had grown so much that one of the House Wrens (for such they proved to be) had died. On the 20th, I found one of the Wrens had left the nest, and the other was perched on the edge preparatory to leaving. This one I caught and examined closely, making sure that it was a House Wren. Is it common for House Wrens to deposit their eggs in other birds' nests?—*Geo. H. Center, Staunton, Ill. O. & O. X. Apr. 1885, p. 64.*

Seven Eggs of the Robin in One Nest.

On July 5, 1889, seven eggs of the Robin (*Merula migratoria*) were found in one nest in Montgomery County, Penn. The bird was sitting, and all seven of the eggs were equally incubated. Four of them are smaller than the normal size, and of a darker color than usual, while the other three are like ordinary eggs of this bird. The difference is so perceptible that they can be readily separated, and would seem to indicate that two birds had laid in the same nest.

A very odd runt set of three eggs of the Robin were also taken in the same locality on May 19, 1889. They were fresh, and the parent bird was sitting on the nest. Singularly enough they contained yolks, for their size is so diminutive that I did not expect to find any in them. They measure: .78 x .65; .80 x .67; .85 x .69.

J. P. N.

O. & O. XIV, Nov. 1889 p. 172

Notes from Manayunk, Phila.
Ellerwood G. Erdie.

Robin, (*Merula Migratoria*). May 27th, took a set of six Robin's eggs, an unusual number.

O. & O. XI, Jan. 1886, p. 7

Robin, (*Merula Migratoria*). May 27th, took a set of six Robin's eggs, an unusual number.

The number of eggs in a set.

W. Hoxie, Ingmore, S. C.

Then again an individual peculiarity is sometimes noticed. I remember a Robin (*Merula migratoria*) up in Massachusetts that raised three broods a year for many seasons in the same orchard. Three eggs were all she ever laid, and the third brood was only two. At last came the inevitable cat, or she might have been going on in the same course until today.

The rule seems to me to be that the more robust the bird the larger the clutch. When the food supply is abundant and regular we naturally look for the highest number of eggs in a set, and vice versa.

This, I think, is a more plausible explanation of the fact than another, which one of my friends suggests. He surmises that large clutches are laid for the purpose of keeping up

the standard number of a species in cases where they are exposed to extreme vicissitudes of some sort. He instances some species whose nests are made on the ground, and whose eggs are peculiarly exposed to depredation. It seems to me that this is merely a case of the survival of the fittest, and that if, in past ages, an allied species had laid small clutches, they have now become extinct.

O. & O. XII, Aug. 1887, p. 134

Lynds Jones - Grinnell, Iowa.

The food supply, as Mr. Hoxie suggests, certainly governs, to a great extent, the number of eggs in the clutch. The years from 1880 to 1885 were unusually wet years and consequently food was abundant. During these years sets of five of Robin, (*Merula migratoria*) and seven of Bluebird, (*Sialia sialis*) were not uncommon, and in the nests of a great many species whose nest complement is usually four, as the Chat (*Icteria virens*), Kingbird (*Tyrannus carolinensis*), Maryland Yellow-throat (*Geothlypis trichas*) and many others, five eggs were found, while the last year or two has been very dry and it has been difficult to secure even common sets.

The nest complement varies also with the time of year. One would hardly expect as large a set of the earlier breeders in July as in April or May.

Thus it appears that a work which should be the standard for the whole field, must be comprehensive enough to include in its sweep the utmost frontiers of oölogy. Such works I trust will not be long wanting.

O. & O. XII, Oct. 1887 p. 66-169

Editor of O. & O.:

In November number of O. & O. Clyde L. Keller asks if any one ever took twenty-four eggs from the nest of one bird in a season.

I took twenty-seven eggs and seven nests from one pair of robins the last season. The robins commenced building about April 10th, in an old hay barn on top of a brace. She worked about two weeks, but the material would not stay, when I nailed a block on the brace to hold the nest, which the birds finished, and I took No. 1 May 1, 1890; four eggs, fresh. No. 2, May 15th, four eggs, incubation two days, nest same place as No. 1. No. 3, May 27th, four eggs, incubation three days, nest in a binder 100 feet from the

barn. No. 4, June 5th, four eggs, incubation two days, nest in same place as No. 1. No. 5, June 14th, four eggs, incubation one day, nest in an apple tree fifty feet from the barn. No. 6, June 26th, four eggs, incubation three days, nest in poplar ten feet from my museum. No. 7, July 6th, three eggs, incubation two days, nest same place as No. 1. Nests built of hay, wool, rags, strings and a few feathers. I have all the nests and eggs. Delos Hatch.

Oakfield, Wis.

O. & O. XVI, April, 1891, p. 64.

Eggs in a Set.

In May, 1880, I took a set of six robins' eggs, and in July, 1881, a set of eight with this peculiar history: Late in June I discovered a pair of robins building in a small plum tree in the yard. I visited the nest daily when completed, and at noon of the day the fourth egg was laid, I took the set of four. Imagine my surprise in going out the next morning to find the nest gone from the plum tree and at seeing it nicely settled in the crotch of a young maple, the next tree to the plum, with the female upon the nest. This was about 9 a. m. About 5 p. m. I visited the nest and found one egg, to which three more were added in the next three consecutive days. The sixth day I took the four, making my set of eight. Queries: How did those birds remove that nest intact? as they must have done, and would the female have laid the eight eggs had I not taken the first four from the nest? I think she would as they were laid in eight consecutive days. I have also caused a robin to lay eight eggs by removing one egg daily. There were three eggs when I first discovered the nest.

Wm. Day, 16 W. 1st St. N. Y.
O. & O. VII, Feb., 1883 p. 13

Rare and Curious Birds' Nests.

BY PROF. THOMAS G. GENTRY.

From time immemorial, it has been the current popular belief that birds of the same species never varied their style of architecture, but constructed the same form of nest, and out of the same materials, as their remotest progenitors did, instinct being the principle by which they were guided. This opinion, though long since exploded by science, is still, I am sorry to say, entertained by those who should know better. An examination of nests from different and widely separated localities affords evidence sufficient to convince the most skeptical of persons of its erroneousness. The most marked differences will be noticeable in the composing materials, as these will be found to vary with the environment, and in a wider degree in the nests of some, than in those of other, species. Even the configuration, which is less prone to change, is often influenced by the circumstances of position and latitude.

Among the Thrushes, the Robin is the most addicted to variation, and this is not wholly confined to the constituents of his usually mud-plastered domicile, but is frequently to be observed in the arrangement thereof, and in the contour and position as well. In Southern New Jersey, where low marshy woods abound on the outskirts of towns and villages, Robins build nests which contrast more markedly with what we are accustomed to see in more northern localities. The great masses of a grayish-green fibrous lichen, which hang from tree and shrub in those sylvan marshes, are freely utilized by them, and its very nature to mat, when pressed together, precludes the necessity of using mud.

In the Summer of 1877 my attention was directed to a

nest of this species which was built upon a railroad embankment. The ground had an inclination of forty-five degrees. To one not conversant with the facts, such a position for a structure of the kind these birds are known to make, would appear impossible. Difficult as the task must seem to be, when viewed from a human standpoint of judging of the builders' capabilities, it was nevertheless accomplished, and in this wise: A semi-circular wall of mud, some three inches in height, was, after much labor, erected, and within the cavity thus formed was placed a coarse, substantial and bulky fabric.

O. & O. X, July, 1885, p. 111-112

A SAGACIOUS ROBIN.—Mrs. Burwell, of Westfield, Conn., found a helpless robin a year ago last summer, which had fallen from its nest while learning to fly. She placed it in a cage and raised it. This summer she released it, thinking the bird would be happier at liberty. The New Haven Register says that last week the robin returned to Mrs. Burwell's yard and flew upon her finger. When spoken to "he was willingly taken into the house, and there he gave unmistakable expressions of delight at being in his old home. After the excitement had passed away the empty cage was brought to the room and straight into it flew the robin. He hopped up to his perch, and there settled down in evident contentment. He hadn't forgotten where to look for his food nor for what his bath was intended. It is believed that the bird didn't know what else to do when the cold weather came."—Public Ledger, Philadelphia, Pa.

Q. & A. XV, Dec, 1880, p. 187.

Portland, Ct. — W. W. Coe.

I have a Martin box on a pole some fifteen feet high. The Martins came in the Spring and stayed a few days and then for some reason best known to themselves left. A pair of Robins at once took possession and built a nest in one of the compartments, and when finished the old lady sat (?) set (?) sot (?) with her head out of the front window, showing that she was "at home."

O + O. VII. Dec. 1882. p. 184.

Auk, XV, July, 1898, p. 274.
Nesting Habits of the Robin.—In Mr. Howe's interesting paper on the 'Breeding Habits of the Robin' I notice (Auk, XV, April, 1898, p. 167) that he has not observed an instance of a second brood being raised in the same nest. So it may be of interest to note that here a slightly different record can be made.

I have under observation at this writing three nests in which second clutches of eggs have been laid and are now being incubated. One is in a window corner of my office,—and in this case the lining was not even changed. The first egg was laid just one week after the young of the first brood left the nest.

Another nest is in the cornice of a stable building, and in this instance the lining was torn out and replaced by fresh material. The third nest is in a young linden tree, and I did not notice the house cleaning after the first brood left.

Last year a Robin built her nest and raised a brood in the transom over the door of the Glen Island Museum. She returned about a week after the flight of the first brood, and laid three eggs, but deserted them, when about half incubated. I think I recognize her as the same one that has built in my office window this year.—S. M. McCORMICK, Glen Island Museum, Westchester Co., New York.

Auk, XV, Oct., 1898, p. 332.
Nesting of the Robin.—In 'The Auk' for July, 1898 (p. 274) I read Mr. S. M. McCormick's very interesting article on the 'Nesting Habits of the Robin,' and having found a rather unusual place for a nest I would like to report it. In Woodbourne, N. Y., Dr. Munson has a large dwelling with a piazza in front over which a honeysuckle has been trained, and in this vine, about eight feet up, on a branch three quarters of an inch in circumference, with six little runners, the nest was built, it being made doubly secure by the winding of grasses around the branches, covering the bottom entirely. But what struck me as remarkable was the almost perpendicular hanging of the nest, looking very much as a China saucer does on a bracket. The bottom partially rested against some wire that the vine ran on, but it was not fastened to it. Two broods were raised in it without any attempt at house-cleaning. Possibly they found there was no time for such a luxury. I was very sorry not to see the birds in it, but I did not get to the place in time.—A. A. CROLIUS, New York City.

Return of Robins to the same Nesting-places.—Mr. Charles S. Mason, of Farmington, Conn., tells me that for the last three years a Robin (*Merula migratoria*), with the back and wings mottled with white, has bred on or near Miss Porter's lawn in that village, and that a young bird was seen last fall partially white. At the time of writing (May 20, 1885) the birds had not appeared this season.

Mr. Charles A. Hewins, of West Roxbury, Mass., writes that "some years ago a Robin built her nest five consecutive years in a woodbine that was trained up and over a piazza. We knew her by a white mark on one side of her head."—JNO. H. SAGE, Portland, Conn.

Auk, 2, July, 1886, p. 304.

DEADLY COMBAT BETWEEN AN ALBINO ROBIN AND A MOLE. — The following interesting and curious incident is quoted from a letter received by me from Miss Maria R. Audubon, granddaughter of the celebrated naturalist, dated Newark, N. J., February 4, 1878. — RUTHVEN DEANE.

"We have had a Robin of the albino type which for two years has built its nest in the same tree, and devoured an immense number of worms from the lawn around the house. It became quite tame, and we naturally felt a sort of ownership in it. One morning I saw something moving or jumping on the ground just under the tree, and on investigation it proved to be the Robin engaged in deadly combat with a mole. I tried to drive the Robin away, and found the mole had it firmly held by the wing. I set it free, and poked the mole off with a stick to some distance. . . .

The Robin flew to a branch of the tree, did not seem much hurt, plumed itself, and finally disappeared among the foliage; the mole, too, made off in an unknown direction. I could find no reason for this unusual battle; no corpses of young Robins could be seen to make feasible the suggestion that a fledgling had fallen from the nest and been attacked by the mole, thereby bringing down the wrath of the parent bird; we knew the mole had not climbed the tree, and we had never heard of a Robin eating a mole.

"Neither party was seen again that day till towards evening, when the Robin was again on the lawn as usual. The next morning I passed the tree about the same hour as on the previous day, and there lay the mole and the Robin, 'beautiful in death,' to use a poetic license, for they really looked very unpleasant. Their bodies were not cold; the Robin very much ruffled as to plumage and bloody about the throat and under the right wing; the mole with his glossy coat 'all the wrong way,' and severely pecked about the head and throat. There was no life in either after I found them."

Bull. N. O. C. 3, April, 1878, p. 104.

1346. *Robins feed their Young in Cages.* By Fred Mather. *Ibid.*
No. 25, July 14, p. 531. *For. & Stream*, Vol. 34, p. 142.
- Vol. 34 1881. *Robins and Olives.* By Arefar. *Ibid.*, March 13, p. 142.
1061. *Birds' Food.* By B. H. Warren, M.D. *Ibid.*, pp. 150-156.—On the food of the *Turdus migratorius* and *Mimus carolinensis*.
Rep. Pennsylvania Bd. of Agriculture, 1885 (1886)
398. *Curious Nesting Places.* By W. W. Worthington. *Ibid.*, p. 138.
—Of Robin and Song Sparrow. *O. & C.* Vol. VII
1943. *Robins Ahead Again.* By S. A. Ball. *Ibid.*, No. 5, May, 1889,
pp. 46-47.—Early nesting. *Nowhere Orn. & Oologist*, Vol. 2.
1433. *Robin's Nest.* By C. H. Leete. *Ibid.*, p. 48.—Repeated repair-
ing of old nests. *Science*, Vol. X No. 233.
1437. *Robin's Nest.* By H. M. Hill. *Ibid.*, p. 72.—Another case of
repeated repairing of old nests. *Science*, Vol. X, No. 235.
- The Oologist, 1573. *An Unusual Friendship.* By L[ewis] P. B[rill]. *Ibid.*, p. 23.—
Robin and House Sparrow sharing a nest. *Amk.* VII, Jan. 1890, p. vi.
1435. *Robin's Nest.* By J. A. Allen. *Ibid.*, p. 60.—Other cases simi-
lar to that narrated in No. 1433. *Science*, Vol. X No. 234.
- Young Oologist, 1536. "Dove vs. Robin;" *White Robin Eggs.* By J. L. Hollister.
Ibid., p. 103.
- Dec. 19, p. 422* 1843. *A December Robin's Nest.* By A. C. Kirkpatrick. *For. & Stream*, Vol. 38
1897, p. 82.

Common Names of American Birds—Ingersoll.

This brings me to *Merula migratoria*, the *Robin*. The word robin is an ancient pet-name for Robert, which is of German descent. That it should have been given to the household favorite of Great Britain is not surprising; in fact some similar personal pet name has been given to that Warbler (*Erythacus rubecula*) all over Europe, and such analogues as "Jenny Wren" and "Jim" (for the Sparrow) are common. The earliest emigrants to America, finding a red-breasted bird inclined to be familiar with them, and eager to be reminded of the home for which they longed regretfully, gladly called it "Robin," not aware, or regardless, of the fact that the old one was a Warbler and the new friend a Thrush. This fact was speedily recognized, but the old name clung, and hence we hear *Robin Redbreast*, *American Robin*, and *Robin Thrush* as surviving appellations throughout the northern half of the continent. In the Southern States, however, the bird's resemblance to the *Turdus pilaris* of Europe came strongly to the mind of the early writers. Hence one finds in old books like those of Brickell, Lawson, Catesby and so on, that it is most often spoken of as the *Field-fair*, *Field-fear*, or *Fieldfare*; of these the last is the proper spelling, and means one who travels or *fares* in the fields; the name is yet heard occasionally.

More distinct recognition of the bird as a *Thrush*, together with its two striking characteristics—red breast and migratory conduct—gives us: *Red-breasted Thrush*, *Merle* ou Rouge gorge du Canada*, *Migratory Thrush*, *Merle erratique*, *Robin Thrush*, *Grive de Canada*, *Omsel* (Pennsylvania German—a corruption of *Amsel*, "Thrush").

I have been able to collect many Indian names (untranslated) for this bird, the Ojibway and Navajo words seeming onomatopoeic: *Opetchee* or *Péchee* (Ojibway), *Kailce che* (Navajo—note resemblance to preceding!), *Ispokwah* (Creek), *Fiskoko* (Iroquois), *Chauncodshah* (Assiniboine). The Ojibways had very pretty legends connected with the Robin, making it a bearer of tidings from supernal sources, and so forth.

Food of the Robin. — On May 15, 1899, while collecting at Onondaga Valley, N. Y., I noticed a nest and young of the Robin (*Merula migratoria*). As I stood near watching the nest the mother bird appeared with a mouthful of larvæ of *Clisicocampa* (probably *C. americana*) which she fed to the young. After she had fed to her young the mouthful of larvæ she returned to a near-by apple tree and obtained more. The larvæ seemed to be nearly full grown, and it seems strange that the Robin should be feeding them these hairy caterpillars. This is the first instance I have known of any bird feeding on them except the Cuckoo. — A. W. PERRIOR, *Syracuse, N. Y. Auk*, XVI, July, 1899, p. 234.

603. [Early Appearance of the Robin.] By D. S. K[ellicott]. *Ibid.*,
p. 71. ~~Sci. Nat. Field Club, 1883~~

The Oologist. 1630. Incidents in Bird Life. By Gus. Rapp. *Ibid.*, No. 12, Dec.,
1889, p. 230.—A Robin attacking a flock of Cedarbirds. *Auk*, VII, Jan. 1890, p. 76

May 9. p. 216- 1764. A Captive Robin. By Robt. B. Lawrence. *Ibid.*, p. 316. ~~For. & Stream, Vol. 31~~

1042. The coming of the robin and other early birds. By Dr. C. Hart Merriam. *Science*, Vol. IV, pp. 571, 572.—On the arrival of the Robin (*Merula migratoria*) at various places in North America in the spring of 1884, and a summary statement of the average dates of arrival of various other species in the latitude of New York City and Southern Connecticut.

601. [Robins Destroying their own Young during Severe Weather.]
By E. E. F[ish]. *Ibid.*, p. 71. ~~Sci. Nat. Field Club, 1883~~

1957. [Robins attacking a Hen.] By A. MacLeod. *Ibid.*, pp. 68-69.
~~The Loon, Vol. 1~~

113. Rob: A Bird History. By Samuel Lockwood. *Ibid.*, XIII, pp.
359-366, June, 1879.—Biography of a caged Robin. *Amer. Naturalist*

1270. Foul Murder. By C. D. Hess. *Ibid.*, No. 18, April 30, p. 424.—
On the slaughter of Robins in the spring for the Baltimore markets.
~~American Field Club, Vol. II~~

632. Anomalies in Bird Life. By Lew Vanderpool. *Ibid.*, No. 20,
p. 383.—An albino Robin; a Baltimore Oriole imitating the Catbird's
song. *For. & Stream*, Vol. XX

803. Increase in growth of young robins. By Charles S. Plumb. *Ibid.*,
p. 159. *Science*, Vol. IV

123. Another Black Robin. By S. Lockwood. *Ibid.*, XIV, p. 521, July,
1880. *Amer. Naturalist*

934. The Robin as a Game Bird. By R. T. *Ibid.*, Sept. 4, p. 105.
For. & Stream, XXIII

1897. [Spring migrants.] By von W. *Ibid.*—A 'wave' of *Merula*
migratoria and *Sialia sialis*. *For. & Stream*, Vol. 31 April 10. p. 228.

1912. Ten Cents Well Invested. By A Steady Reader. *Ibid.*—A
tamed Robin. *For. & Stream*, Vol. 34 May 8. p. 308

503. Gallant Conduct of a Robin. By Samuel Lockwood. *Ibid.*,
XVII, p. 1307. *Amer. Naturalist*.

264. Osteological Abnormalities. By Frederic A. Lucas. *Ibid.*, p. 12.—
Devoted mainly to mammals, but notes a malformed skull each of the
common Fowl and Robin, and lower mandible in a South American
Bittern (*Tigrisoma*). *Words Nat. Sci. Bul*, III

1075. Winter Range of the Robin. By W. W. Cooke. *Ibid.*, Mch.
11, p. 125. *For. & Stream*, XXIV

136. Cutworms from Stomach of Robin. *Ibid.*, p. 201.—Editorial comment
and determination of specimens sent by S. A. F[orbes] of Normal, Ill.
Amer. Entomologist, New Ser. I

1299. Robins and China Berries. By Edward Jack. *Ibid.*, No. 4, Feb.
17, p. 66. See also *ibid.*, No. 7, Mch. 10, p. 129. *For. & Stream*, Vol. XXVIII

490. Food of the Nestlings of *Turdus migratorius*. By Elisha Slade.
Ibid., XVI, p. 1007, 1008. *Amer. Naturalist*.

923. Fruit-eating Birds. By Byrne. *Ibid.*, p. 24.—Arrangement of
the Robin and Catbird. *For. & Stream*, XXIII

940. Robins and Strawberries. By Nessmuk. *Ibid.*, Sept. 25, p. 164.
—Verdict heavily against the Robin. *For. & Stream*, XXIII

576. Robins, sparrows and earth-worms. By F. H. Storer. *Ibid.*,
No. 16, pp. 457, 458.—English Sparrows stealing worms from Robins.
Science, Vol. I

107. The Robin's Food. By David Alexander Lyle. *Ibid.*, XII, pp.
448-453, June, 1878.—Account of a nestling reared in a cage and of the
food given it, etc. *Amer. Naturalist*

1224. Out of doors? A Question of Taste. By Fannie Pearson Hardy,
On food habits of *Sphyrapicus varius*, *Merula migratoria*, *Carduelis*
purpurea, etc. *For. & Stream*, Vol. 38, Nov. 14. p. 323.
File under --- *Merula migratoria*

New Brunswick Notes - Chambelain.

In March last I witnessed a scene which convinced me that the saying "misery loves company" is as truly applicable to birds as to men. It was a keen, frosty morning in the third week of the month, a day as typical of midwinter as any that January brings us, for the snow still lay deep and firm upon the ground and neither lakes nor streams had thawed; while the dry, thin air, though stirred by no wind, was so intensely cold that I was forced to walk very briskly and administer frequent rubs to nose and cheeks to keep at all comfortable. Passing along a suburban road about sunrise, my attention was attracted by the note of a Robin, which I soon discovered perched on a tree near by, wearing an appearance of utter wretchedness. His body was contracted as if by pain, his feathers were ruffled, and his head drooped. At long intervals he gave voice to a feeble, sad-toned note, and crouching thus, shivering with cold, hungry no doubt, and forlorn, appeared, physically and morally, but the ghostly shadow of that sprightly and vivacious Robin Redbreast that had filled the air with his blithesome carol in the happy spring-time. As I stood watching him I heard another note. Robin heard it also, and arousing a little called back. The new note was repeated and I recognized the voice as that of a Red-eyed Vireo, which I detected searching for a breakfast on the leafless branches of a distant birch. Robin's appearance was at once changed; his body and head were held erect, his feathers smoothed, and his voice rang out clear and strong. After a few more calls and a few strains of song both birds flew to a tree about mid-way between their first positions, and on approaching it to obtain a more certain identification of the Vireo, I found the pair sitting side by side on the same limb, their faces turned toward the newly-risen sun, singing away as merrily as if cold and hunger were unknown to them, or at least uncared for. They seemed indeed a joyous pair, yet there was something singularly pathetic in their very happiness. Possibly the Robin might contend successfully against the severity of our weather, as I have known many of his race to do before him. But the Greenlets ordinarily remain with us only during the warmest weather and this thoughtless fellow would, I feared, be unable to withstand the cold without a generous supply of insect food, which he would find it impossible to obtain.

After all, mused I, as I turned away, leaving the oddly assorted pair still singing, what better ending for such a life as a bird's could be desired! The cold-benumbed brain registers no pain, nor creates other than pleasing fancies. And how appropriate a death for so fairy-like a creature — to fall peacefully asleep upon the virgin snow, with the wind weaving over his stiffening form a shroud of glittering crystals.

matter a record in the Bulletin as a contribution to bird psychology. "We often hear," says the writer, "of one-idea people, and the sensations they produce. A one-idea bird, however, is something of a novelty. One of the windows of a house in Clinton Street is at present haunted by such a bird in the shape of a Robin. On the morning of May 21st it made its *début* from the window-sill. From the first this has been its mode of procedure. It alights on the window-ledge, taps vigorously on the pane, then flies up and down very rapidly about three or four times. Then it pauses a moment, steps over to the next pane, and repeats the operation. It has never been observed to tap or fly upon the third pane. After tapping or flapping industriously for half an hour or so, it descends to the ground or garden near by, makes a short repast of a bug or worm, returns again to the window-ledge and goes through with the same process. It begins its operations early in the morning, and continues until the shadows of evening begin to fall. Nothing so far seems to have seriously interrupted its movements. It flies away when the white shade is drawn down, but returns again, walks back and forward across the ledge, and peers in at the narrow, uncovered space below the bottom of the shade. It never taps or flutters against the window when the shade is drawn. It simply looks about, flies away, and returns again, until it finds the shade raised. It then repeats its beatings and fluttering as before. If, however, the outside blinds are closed, it appears quite frantic. It flies at them, and if it can gain a foothold anywhere, it thrusts its beak between the shutters and pecks violently at the window until tired out, then it retires and waits until they are opened again. It does not seem to be especially shy or tame. It flies off at the too near approach of a person, cat, or lawnmower. It returns again as soon as they remove a short distance away. Thus has it performed for three days, and shows no signs of giving up.

"Its curious persistency has attracted much attention, and called forth various remarks. One laughingly says, it must be an evil spirit in bird form. Others are inclined to regard it as an 'ominous bird.' One man, after watching it for some time, remarked that it saw its shadow in the window and mistook it for a lost mate. This seems probable, for on investigation it was found that the window, being relieved by a dark background, reflected images almost as distinctly as a mirror. It was further

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ST. GEO. MIVART, *F.R.S.*, *Sec. L. S.*

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ALFRED NEWTON, *F.R.S., V.P.Z.S.*, *Professor of Zoology in the University of Cambridge.*

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General Notes.

ODD BEHAVIOR OF A ROBIN AND A YELLOW WARBLER.—Newspaper ornithology is generally worthy of little attention, but an article entitled "A Robin's Persistency," published in the "Daily Times" of Watertown, N. Y., in the issue of May 24 of this year, comes to me with private indorsements of such a thoroughly trustworthy character, and the incident related is so strange, that it seems worth while to give the

A letter by the writer of the above to a friend continues the history as follows:—

"I have postponed my visit to — for a few days; and for a reason which perhaps no one but an ornithologist would be likely to appreciate. I am detained by a *Robin*, and though its visits are paid at a neighbor's window, still I am fascinated. Its first *three days'* visit is described as accurately as my mother tongue would enable me to do in the enclosed paragraph published in our daily of yesterday. It still persists. The shade was left up last night, and when I awoke this morning, soon after daybreak, it was knocking loudly at the chosen window. Our home is quite near, and when my window, which is nearly opposite, is open, I hear it very plainly. It continued with but slight interruptions until about eight o'clock, when the lady of the house opened the window. It then flew down, but even now it is hopping about in the grass near by as though watching for the window to close. I have never made ornithology a study, but this seems to me a very uncommon proceeding. If you know any ornithologist to whom you think it would be interesting, please impart." Later information states that the same proceedings continued until the writer of the above left town, — nine days in all; but that on the ninth day the tappings were more feeble, and were not continued later than 7 A. M., after which time the bird was not seen that day.

As these sheets are passing through the press, a male Yellow Warbler (*Dendroica aestiva*) is behaving in a quite similar manner at my own house. For several weeks the bird has been in the habit of frequently visiting a grape-vine trellis in front of a window of the dining-room, from which he has been accustomed to sing, wholly undisturbed by the people or the proceedings within the room. Although the trellis has been a favorite resort for the bird, his behavior was not especially noteworthy till June 7, when he began to persistently fly against the window-panes, often striking them with considerable violence.

The trellis stands about eighteen inches from the window, and the portion immediately in front of it is nearly bare, and consists of two horizontal bars, about three feet apart. These form his perch, from which he usually makes his dive at the window. Immediately in front of the window is an open field with a group of five large apple-trees, all within twenty to fifty feet of the house. These, with the trellis and portions of the grape-vine it supports are vividly mirrored in the window, as well as the general landscape, and of course the bird himself whenever he visits the trellis. But his own reflection does not seem to be the point of attraction, as he usually strikes the pane two or three feet above the point opposite his perch, but sometimes dives down from the upper bar of the trellis to the lower panes of the window. Occasionally he flies directly from the apple-trees against the window, but generally first alights on the bars of the trellis. For several days his visits have begun with early day-break, and have been continued throughout the day till after sunset, he

rarely leaving the window for more than a few minutes at a time. He sings almost constantly. I have seen him strike the window-panes as many as ten times in a minute, barely pausing on the trellis between each plunge long enough to utter with much energy his shrill little song. These proceedings he will sometimes repeat for several minutes, then fly to the trees and return again a minute or two later, usually with a canker-worm in his beak obtained from the apple-trees. This he usually bruises on the trellis-bar and swallows at once before diving at the window, but not unfrequently makes several plunges at the window with the worm in his beak. He strikes the window-pane with such force that the clicking of his bill and feet against the glass may be heard to a considerable distance. He usually strikes the large pane a foot or two from the top, fluttering upward to the top, when he returns to his perch. The upper panes receive the chief part of his attention, but he not unfrequently descends to the lower ones, which he follows upward in the same manner to the top of the lower sash. He takes little notice of people standing quietly before the window, and will often strike the pane within six inches of the observer's face.

If the upper sash be lowered a few inches he will often, after flying against the glass, perch on the top of the open window, peer into the room, utter his song, hop to the trellis, and immediately repeat the operation. I once drew the upper sash half-way down, so as to give him free access to the room. At first he would strike the glass as usual, and then perch on the sash. I left the room for an hour, and on returning found him a prisoner between the sashes, he having evidently in the mean time entered the room, and in trying to make his exit had fluttered down between the sashes, where he had obviously been struggling for some minutes. I freed him, and presumed that this experience would serve to cure him of his strange infatuation for the window. This was on the evening of the first day, but he returned early the next morning to the window, flying against it with unabated persistency. This has continued for three days, and the window seems to have lost none of its charm for him.

In other respects he seems a perfectly sane bird: he has a mate and a nest in one of the neighboring apple-trees, and when it is approached he leaves the window and flies about the intruder with manifestations of extreme solicitude. He is also quite vigilant in driving away other small birds that venture too near his home. Whether he mistakes his own reflection in the window for a rival, or what the charm is, is not obvious, as his behavior in all other respects is apparently entirely natural. As already stated, he almost invariably strikes the window-pane at a point either considerably above or below his perch on the trellis, so that evidently he does not aim at his own reflection in the window.—J. A. ALLEN, Cambridge, Mass.

P. S. — His visits to the window became less frequent on the fourth day, but were continued with considerable frequency for about ten or twelve

the irresponsible manner in which her people have treated questions of great and far-reaching public import. The irony of the Paris bookseller who, when asked for a copy of the French constitution, replied that he did not keep periodical literature, was sad as well as mordant. It was this same irresponsibility in lofty station that made Palmerston

an object of hatred in every court in Europe, and that has ministered directly to England's isolation. It is such irresponsibility among men of influence that is rendering wise and conservative settlement of our own foreign questions increasingly difficult, and an assertion of true American dignity well-nigh impossible.

Edward M. Chapman.



The Century, Vol. 4, Feb. 1896, pp. 545-546

THREE LETTERS FROM JAMES RUSSELL LOWELL.



IN the spring of 1890 a discussion arose between a friend and myself in regard to the following sentence in Lowell's «My Garden Acquaintance»: «The robins are not good solo singers; but their chorus, as, like primitive fire-worshippers, they hail the return of light and warmth to the earth, is unrivaled.»

The argument was rather one-sided. My friend spoke with the conviction born of his long and close observation of the robin. I could only urge my confidence in the correctness of Mr. Lowell's statement.

At length, feeling my inability to defend my favorite author, I resolved to write and ask Mr. Lowell himself to explain the passage. By return mail I received a letter in Mr. Lowell's own hand, which read as follows:

«ELMWOOD, CAMBRIDGE, MASS.,
May 2, 1890.

«DEAR MISS CLARKE: I used to be thought a fairly good observer; indeed, Darwin once paid me the doubtful compliment of saying to me, (You ought to have been a naturalist.) I have lived in the same house (except when in Europe) for seventy-one years, and robins find good building-sites in my trees. I once counted seventy on my lawn at the same time. As the males sing without any reference to each other of a morning, and as there are many, I spoke of it, loosely, perhaps, as a chorus. Considered as a thrush, the robin is surely inferior to most of his kind; I am tempted to say all of them. Now and then

there is a better singer among them. I have heard one this year who entertained me with some very agreeable variations on their habitual ding-dong.

«As for their singing during the day, I am surprised that your friend has never heard their (rain-song,) which times itself by the fore-feeling of a shower in the air. Nay, I heard the performer of which I have just spoken at about half-past four in the afternoon. If yours don't begin matins until five o'clock they are lazy creatures. Ours salute the day. But perhaps they don't build with you? That would make a difference in the singing; for though, as I think, rather *bourgeois*, it is love that makes them sing, as it made *Polonius*, no doubt, when he suffered great extremity for love.

«All the same, though I can't quite give in to your friend, I like her¹ all the better for taking sides with a bird against a man. The worst of them are better than we deserve.

«Faithfully yours,
«J. R. LOWELL.»

I received this letter just as I was starting on a visit to the home of the Hon. Charles Anderson, a brother of Colonel Robert Anderson, and ex-Governor of Ohio. I resolved to delay answering the letter—for of course I must write and thank Mr. Lowell—until I had shown it to Governor Anderson. As I anticipated, Governor Anderson was much interested in the letter. He told me that years before, when he was a lawyer in Cincinnati, he had entertained Mr. Lowell during

¹ He evidently thought the friend a woman.

a political convention. In replying to Mr. Lowell I mentioned this circumstance, adding: "Governor Anderson, with characteristic modesty, says that you have doubtless forgotten him; but I do not believe that any one who ever met so charming a man as Governor Anderson—Colonel Anderson, I think he was when you saw him—could forget him."

This is Mr. Lowell's reply:

«ELMWOOD, CAMBRIDGE, MASS.,
May 17, 1890.

«DEAR MISS CLARKE: Do I remember Charles Anderson,—colonel or governor matters not,—the handsome, fair-haired, brilliant Norseman who, with all his refinement, had a look as if he would cheerfully have gone out with his battle-axe to a *holmgang*? One is not blest with such apparitions so often as to forget them. I suppose the yellow hair is silver now, but men like him do not grow older. May I ask of your kindness to convey to him my warmest salutations?

«If I said that birds were better than men I was not to be taken too seriously. But you shall not put me down in that peremptory fashion. I did n't say they were better than women, did I? You know I did n't, nor ever will!

«I have listened more warily to my robins since your letter, and find that I was right, though I take no credit to myself for what was merely a matter of familiar memory. During the love-making season they may, and often do, sing at any hour of the day.

«You will be glad to hear that my few acres are very *birdy* this year, and many trees full of new homes and songs. I had heard such stories of the usurping habits of the English sparrow which has been naturalized here that I feared to find our native birds diminished. But I think it is not so. How I love creatures that can both fly and sing! 'T is what we all would if we could.

«There is something very pleasant to me in your letters, and I thank you for them. For the first time in my life I have been seriously ill this winter, and am still to a certain extent invalidated by my physician. The less I feel myself worth, the pleasanter it is to hear that I have been something to somebody, especially to one who loves Tennyson, so easily the master of us all.

«Faithfully yours,
«J. R. LOWELL.»

In my second letter I had ventured upon an expression of my admiration for Mr. Lowell, and, feeling that no words of my own would

express my meaning with sufficient delicacy, I had made use of a quotation from Tennyson. It is to this that Mr. Lowell refers in the last paragraph of his letter.

But now I found myself in an embarrassing position. I felt that I ought not to intrude longer upon Mr. Lowell, and yet would it be courteous to one of his age and position to permit him to write the last letter? I finally decided there could be nothing presumptuous in writing again, if I made it evident that I did not expect him to respond.

But his unfailing courtesy would not permit him to drop the correspondence in that manner, as the following letter testifies:

«ELMWOOD, CAMBRIDGE, MASS.,
May 27, 1890.

«DEAR MISS CLARKE: A line more to thank you for your very cordial and in all ways welcome letters. You will understand why I cannot undertake any additional regular correspondence, however agreeable.

«This gives me the chance to make a correction. In my first note to you I mentioned that I had been led to raise my opinion of the robin as a solo singer by the fine performance of one which I had heard this year. But I had been deluded. The bird which had shaken my opinion turns out to have been a rose-breasted grossbeak. All the first part of his song is so like that of the robin that I am still puzzled by him sometimes; but as he goes on he is tempted into variations, voluntaries, and raptures of which the robin is quite incapable. It is the difference between Shelley and Shenstone. I had seen him only once before in my life, and never heard him. But this year two pairs of them are, I hope, building within my boundaries, and the males sing amorpeans from the tops of neighboring trees. It is a pleasure to see as well as to hear them sing, for this lyrical ecstasy makes their wings quiver with the delight of it. 'T is a great joy to have them in my old age.

«I must n't have more of your sympathy than I deserve—pleasant as it is. I am *feeling* very well, but have to be very careful of myself, which is a bore. I have made the wholesome discovery that at seventy one gets beyond middle life. Faithfully yours,

«J. R. LOWELL.»

I did not know then that these letters were penned when Mr. Lowell was suffering from a disease which had compelled him to give up outdoor exercise and continuous literary labor, and which a few months later ended his life.

Mary A. Clarke.

ON GEOGRAPHICAL VARIATION IN *TURDUS*
MIGRATORIUS.

BY ROBERT RIDGWAY.

CERTAIN differences between Eastern specimens of the common Robin and those from the Rocky Mountains were first pointed out by Professor Baird, in his "Review of American Birds" (1864, pp. 28, 29), in the following words: "In highly plumaged specimens from the East the feathers of the interscapular region are frequently, even generally, tinged with blackish in their centres, passing gradually into ash on the edges, and the black of the head ceases to be abruptly defined. There is also usually a well-defined whitish tip, half an inch long, to the outer tail-feathers. In Rocky Mountain skins the tail is either black, except a very narrow whitish edge, or the white tips of Eastern specimens are replaced by a dull gray. The black of the head, too, is better defined, the interscapular feathers more uniformly ash, and the upper parts without the faint brownish wash so frequently seen in Eastern specimens. There are, however, some exceptions to these features in specimens from each locality. The colors generally of Western birds appear to be paler." Again, in the "History of North American Birds" (Vol. I, p. 25), the same and additional differences are alluded to, as follows: "There are some variations, both of color and proportions, between Eastern and Western specimens of the Robin. In the latter there is a tendency to a longer tail, though the difference is not marked; and, as a rule, they slightly exceed Eastern specimens in size. The broad white tip to the lateral tail-feather — so conspicuous a mark of Eastern birds — is scarcely to be found at all in any Western ones; and in the latter the black of the head is very sharply defined against the lighter, clearer ash of the back, there hardly ever being a tendency in it to continue backward in the form of central spots to the feathers, as is almost constantly seen in Eastern examples; or of Western specimens, the rufous, too, is appreciably lighter than in Eastern."

Very extensive material received at the National Museum since the above was written tends to confirm the constancy of most of these differences between Eastern and Western Robins, while other

points of diversity, previously overlooked, have been detected, the most important being the much blacker tail of Eastern birds, and their decidedly shorter wing.

Upon the whole, the two forms seem to constitute two very strongly marked geographical races, which may be distinguished as follows: —

T. migratorius. — Wing, 4.85–5.35; tail, 4.10–4.60; bill, from nostril, .48–.51; tarsus, 1.20–1.35; middle toe, .85–.92.* Inner web of outer tail-feather with a distinct white terminal spot. Tail-feathers of adult male dusky black, with slight edging of plumbeous. *Habitat*. Eastern region, including the whole of Alaska, Eastern Mexico, and the eastern border of the Missouri Plains.

T. propinquus, RIDGW. (MSS.). — Wing, 5.35–5.60; tail, 4.60–4.70; bill, from nostril, .50–.55; tarsus, 1.30–1.35; middle toe, .90. Inner web of lateral tail-feather with merely a narrower terminal edging of white, or with no white whatever. Tail-feathers of adult male dusky slate, without distinctly paler edges. *Habitat*. Western region, including eastern base of Rocky Mountains.

We find the character of blackish centres to the interscapulars in Eastern specimens to be too inconstant a feature to serve as a character. No specimens of the Western series are so marked, but many Eastern ones, otherwise typical, have no trace of these markings. It is a well-known fact that the eggs of the Western Robins average considerably larger in size than those of Eastern birds.

Bull. N.O.C. 2, Jan., 1877, p. 8-9.

Auk, XV, April, 1898, pp. 162-7.

BREEDING HABITS OF THE AMERICAN ROBIN
(*MERULA MIGRATORIA*) IN EASTERN
MASSACHUSETTS.

BY REGINALD HEBER HOWE, JR.

ARRIVAL AND DATES OF NESTING.

THE arrival of migrant male Robins in Eastern Massachusetts occurs early in March, the females about a week later and generally by the fifteenth of the month they are to be seen in fair numbers in their old haunts. By the tenth of April nests are to be found under construction—these early builders as often, I think, choosing the bare crotch of a maple, as the more protected, both from weather and sight, branches of a spruce or pine. Throughout the rest of April and fully two thirds of May we may find nests under construction that are to hold the first brood. I am inclined to believe that the first arrivals are the early builders and that the birds that arrive in late March and early April are the birds we find nest constructing in early or mid May.

MATING.

For the same reason that I believe individual Crows and Blue Jays are resident in a locality, I believe that a pair of Robins that have nested in a certain tree or in a certain area are the identical birds that have done so for years. In other words, an ornithologist continually in the field in one bit of country year after year comes to know the general habits of certain common birds, their special ways and traits, and with a degree of certainty can assert that they are the same birds he sees the year round or that come to his locality yearly. For instance, I know of a pair of Robins that nested in a friend's garden three years in succession. Food was placed outside the dining room window during their first spring, of which they partook regularly. Each successive year they returned to the garden to breed, and on arrival would come to be fed at the window as they had been accustomed to do. The young were also brought by their parents

to be fed, but I have every reason to believe that it was the parent birds that returned each year and not a pair of which either the male or female were one of the young of the previous year. (See Auk, Vol. II, p. 304.) Thus I feel confident that a pair of Robins once mated remain so for a number of years until separated by injury or death. I can well imagine it to be within the range of possibility, that a pair of birds leaving their summer home could keep together, joining some flock made up of other pairs, and migrate and winter in company; in fact, I think for a pair to separate, whose love for each other is as strong as we know it to be, and to wander apart never to meet again, seems harder to believe than disbelieve.

The arrival of the males before the females can be explained by the male birds of the winter flock starting in advance of their less hardy mates (for winter records in the north of various species are almost always of male birds), to be followed by the females a week or so later when the weather is less severe; and it is probable that the more pronounced Robin courtships we see going on about us in the spring are the birds who lost their mates during the previous winter, remating, and the young of the year being wooed for the first time.

THE CHOOSING OF THE NEST SITE.

In my careful observing of Robins at the breeding season I have only once seen a pair choose a nest site. I chanced to be looking at a female Robin one day (1897) sitting in a crotch of a wild cherry tree when she flew to the ground and began chasing about a male, evidently her mate. In a minute they both flew to the crotch that she had just left and stood peering about; the male flew to the ground again in a few seconds and the female also flew, returning in a minute with the first few twigs that were to form the foundation of the nest. I believe the female chooses the site, as it is she who does the greater part of the building.

THE NEST SITE.

The Robin's nest is too common an object to every observer of bird life to waste space in describing its various situations. Suf-

fice it to say, I have found the nest from two to fifty feet elevation, and in almost every growth of tree common to this locality, as well as on buildings, and others in such places as old carriages, wood piles, etc.

CONSTRUCTION OF NEST.

Having watched a number of nests during construction, I have been able to determine a fair average of the time required, and other interesting points.

After the site has been chosen the building of a substantial foundation of twigs, grasses, string, etc., is begun; this finished, finer grasses are brought and the bird standing in the centre of the foundation draws them round. After the sides of the nest have been fairly well made the bird by turning around in the nest shapes it to the exact contour of its body, and by pushing its breast far down into the nest and raising the primaries, it presses the nest with the wrist of the wing into a compact and perfect mass. The next work is the plastering with mud; a rainy day is generally chosen for this work; the bird brings the mud in its bill and, placing it on the inside of the nest, flattens it into shape by exactly the methods just described. All that remains now is the lining, which is made of fine grasses and which adheres to the mud, making a substantial though not a particularly beautiful nest.

The average measurements of nest are; depth, outside, 3 inches; depth, inside, $2\frac{1}{2}$ inches; breadth, outside, $6\frac{1}{2}$ inches; breadth, inside, 4 inches.

The average period for construction is about six days—the longest period, fifteen days and the shortest, three days. The weather and whether the female is pressed to drop her eggs seem to be the chief explanation of the variation in time. Both sexes build, but the bulk of the work is done by the female. After a nest has been finished, there is often, in fact generally, a delay of from one to four days before laying.

LAYING AND INCUBATION.

As far as my observations go, one egg is laid each twenty-four hours until the complete set is finished which consists of from

two to four eggs (very rarely five in this locality); and if the weather is cold the bird often at once begins to set, that is, with the laying of the first egg. Otherwise, if the weather is mild, setting does not commence until the complete clutch is laid. The eggs are generally laid, I believe, between the hours of eleven P. M. and four A. M., but this is at least not always so. The average period of incubation is thirteen days, but a variation of nearly twenty-four hours is not very uncommon. The female incubates almost unassisted: the male, however, I have observed in a number of cases, upon the female leaving the nest, takes her place, sometimes on the edge of the nest, while at other times he settles himself upon the nest, somewhat awkwardly, but in no case have I ever seen a male sit for more than three minutes in succession. The female does not leave the nest at noon to feed, when the heat of the sun is the strongest, as one would suppose, but leaves the nest generally about nine to ten A. M. and five to six P. M. I have never observed the male feed the female while incubating.

CARE AND GROWTH OF THE YOUNG.

The young may all be hatched inside of twenty-four hours or during a space of three days; this is governed by whether the female begins to incubate at the completion of the clutch or, by reason of cold weather, at the laying of the first or second egg. As soon as the young are hatched both birds commence to supply them with food, the male doing his full share. For the first few days the young apparently do not need much nourishment only warmth, for the female leaves the nest but rarely during this period. The eyes of the young open on the sixth day, and from the third day on, the rapidity of feather growth is astounding. The parents are now kept busy from morn till eve supplying the wants of the young, the birds bringing food to the nest nearly twenty times per hour.

The method of keeping the nest clean from the excrement of the young is interesting. Each time the female comes to the nest with food she stands, after delivering the morsel, until one of the young, having elevated its hinder parts, excretes on the edge of the nest, when she stoops forward and apparently swal-

TABLE OF GROWTH OF YOUNG.¹

| No. of Bird | Days | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------------|---|---|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---|
| 1 | Weight of young per day. | | $\frac{4}{16}$ oz. | $\frac{8}{16}$ oz. | $\frac{3}{4}$ oz. | $1\frac{1}{4}$ oz. | $1\frac{1}{8}$ oz. | $1\frac{1}{8}$ oz. | 2 oz. | 2 oz. | $2\frac{1}{16}$ oz. | 2 oz. |
| | Growth of wing per day. | | .20 | | | .90 | 1.10 | 1.70 | 2.18 | 2.50 | 2.60 | 2.75 |
| | Weight of young per day. | | $\frac{4}{16}$ oz. | $\frac{8}{16}$ oz. | $\frac{3}{4}$ oz. | 1 oz. | $1\frac{1}{8}$ oz. | $1\frac{1}{8}$ oz. | $1\frac{1}{8}$ oz. | $2\frac{1}{4}$ oz. | $2\frac{3}{4}$ oz. | $2\frac{5}{8}$ oz. |
| 2 | Growth of wing per day. | | .20 | | | .90 | 1.10 | 1.82 | 2.04 | 2.10 | 2.25 | 2.34 |
| | Weight of young per day. | | $\frac{4}{16}$ oz. | $\frac{8}{16}$ oz. | $\frac{3}{4}$ oz. | $1\frac{1}{4}$ oz. | $1\frac{1}{8}$ oz. | $1\frac{1}{8}$ oz. | 2 oz. | 2 oz. | $2\frac{1}{8}$ oz. | 2 oz. |
| | Growth of wing per day. | | .20 | | | .90 | 1.10 | 1.78 | 2.12 | 2.25 | 2.35 | 2.72 |
| 3 | Weight of adult bird 3 oz. | | | | | | | | | | | Body entirely feathered. |
| | Length of wing of adult bird 5.30 hundredths. | | | | | | | | | | | Marked increase in feather development. |
| | | | | | | | | | | | | Marked increase in feather development. |

¹ Young not weighed or measured after eleventh day for fear of driving from nest.

*lows*¹ the excrement. I have also observed that at times she would not swallow the excrement but carry it in her bill from the nest. During the last few days the young are in the nest they spend most of their time preening themselves.

During the period the young are in the nest I have never observed the male to sit, but I know of a reported instance where a male was known to do so. The young rarely all leave the nest at once, under natural conditions, but the nest is empty generally about fourteen days after the young hatch; they remain, however, for over a week in the immediate neighborhood of the nest, cared for by their parents. Young birds in this locality may be seen on wing as early as May 15.

SECOND BROODS.

The second brood is never, as far as my observations go, raised from the same nest but from another constructed in the immediate vicinity of the former one. I have no evidence and do not believe that a third brood is ever raised, but not uncommonly, fresh eggs are to be found late in July and young birds late in August.

| Nest No. | Period of Construction. | No. of Eggs. | Period of Incubation. | Period Young remain in Nest. | Entire Nesting Period. | Species of Tree Nest in. | Elevation of Nest. |
|----------|-------------------------|--------------|-----------------------|------------------------------|------------------------|--------------------------|--------------------|
| 1 | 15 days. | 4 | 12 days 20 hrs. | 15 days. | 45 days. | Spruce. | 20 feet. |
| 2 | 3 " | deserted. | — | — | — | { Woodbine, 8 " | 8 " |
| 3 | 3 " | 2 | 13 days. | 16 days. | 38 days. | { Spruce. 15 " | 15 " |
| 4 | 6 " | 4 | blown down. | — | — | { Spruce. 12 " | 12 " |
| 5 | 8 " | 3 | 13 days 5 hrs. | 11 days. | 36 days. | { Cedar. 10 " | 10 " |
| 6 | 3 " | 4 | 13 days. | 15 " | 35 " | { Wild cherry. 22 " | 22 " |
| 7 | — | 3 | 13 days. | 12 " | { approx. 130 days. | { Spruce. 13 " | 13 " |
| 8 | — | 1 | taken. | — | — | Apple. 18 " | 18 " |
| 9 | deserted. | — | — | — | — | Oak. 19 " | 19 " |
| 10 | " | — | — | — | — | Elm. 20 " | 20 " |
| 11 | 4 days. | 4 | taken. | — | — | Oak. 18 " | 18 " |
| Average. | 6 days. | 3 | 13 days. | 14 days. | 37 days. | — | 16 feet. |

¹ The bird may eject the excrement after flying to some distance from the nest.

Summer Robin Roosts.

Brewster.
H

SUMMER ROBIN ROOSTS.

BY WILLIAM BREWSTER.

PERHAPS the greatest charm of ornithology is that its pursuit yields surprises when they are least expected. Especially true is this of the study of birds' habits, for a close watch kept on even the commoner species is sure, sooner or later, to reveal facts not in the books. Nor is this strange, for a lifetime is not long enough for fathoming all the secrets of the woods and fields immediately about one's home, while the general subject is inexhaustible. Moreover, a discovery which comes early and easily to one may long elude others equally vigilant. Yet who would suspect that at this late day, there could be an unwritten page in the life history of our Robin (*Merula migratoria*), a species of unusually general distribution, abundant nearly everywhere, and probably familiar to a larger number of people than any other bird on this continent? Nevertheless no author whom I have consulted so much as mentions the fact that Robins, while still in their summer haunts, form roosts* which are resorted to regularly night after night and season after season by hundreds or even thousands. Such gatherings, however, are by no means uncommon in Massachusetts, and they doubtless occur throughout the entire North, wherever Robins abound.

Possibly they have been neglected rather than overlooked. In either case I hope to show that they are not without interest and importance. What I have to say of them proceeds chiefly from personal experience, but I have also drawn freely from the notes of Messrs. Faxon, Batchelder and Torrey†, to all of whom I am indebted for much valuable aid in the preparation of this paper.

Our Massachusetts Robin roosts are invariably in low-lying woods which are usually swampy and are composed of such de-

*It has been known for some time of course, that Robins form large roosts while in their winter quarters in the South, but no very exact or precise information concerning these roosts seems to have been thus far recorded.

†Mr. Torrey has written an article on this subject for the October issue of the 'Atlantic Monthly.' It will relate, I understand, chiefly to a roost at Melrose Highlands which he has studied closely.

ROBIN ROOSTS.

OF all the nearly eight hundred species of North American birds, the robin is without question the one most generally known. Its great commonness and wide distribution have something to do with this fact, but can hardly be said to account for it altogether. The red-eyed vireo has almost as extensive a range, and at least in New England is possibly more numerous; but except among ornithologists it remains a stranger, even to country-bred people. Not long ago a man, whose writings show him to be an exceptionally intelligent lover of things out-of-doors, wrote to me that to the best of his knowledge he had never seen a vireo of any kind. The robin owes its universal recognition partly to its size and perfectly distinctive dress, partly to its early arrival in the spring, but especially to the nature of its nesting and feeding habits, which bring it constantly under every one's eye.

It would seem impossible, at this late day, to say anything new about so familiar a bird; but the robin has one interesting and remarkable habit, to which there is no allusion in any of our systematic ornithological treatises, so far as I am aware, although many individual observers must have taken notice of it. I mean the habit of roosting at night in large flocks, while still on its breeding grounds, and long before the close of the breeding season.¹

Toward the end of summer, two years ago, I saw what looked like a daily passage back and forth of small companies of robins. A friend, living in another town, had noticed similar occurrences,

and more than once we discussed the subject; agreeing that such movements were probably not connected in any way with the grand southward migration, which, so far as we could judge, had not yet commenced, but that birds must be flying to and from some nightly resort. The flocks were small, however, and neither of us suspected the full significance of what we had seen.

On the 19th of July, 1889, the same friend informed me that one of our Cambridge ornithologists had found a robin roost in that city, — a wood in which great numbers of birds congregated every night. This led me to keep a sharper eye upon my own robins, whom I had already noticed repeating their previous year's actions. Every evening, shortly before and after sunset, they were to be seen flying, now singly, now by twos and threes, or even by the half dozen, evidently on their way to some rendezvous. I was suspicious of a rather distant hilltop covered with pine-trees; but before I could make it convenient to visit the place at the proper hour, I discovered, quite unexpectedly, that the roost was close by the very road up and down which I had been walking: an isolated piece of swampy wood, a few acres in extent, mostly a dense growth of gray birches and swamp white oaks, but with a sprinkling of maples and other deciduous trees. It is bounded on the further side by a wet meadow; at the eastern end by a little ice-pond, with a dwelling-house and other buildings beside it, all within a stone's throw of the wood.

¹ Six years ago, in the summer of 1884, Mr. William Brewster discovered such a general roost in Belmont, Mass. The place has been used ever since for the same purpose, and is frequently mentioned in the following pages. Just as my manuscript is ready for the printer,

Mr. Brewster informs me that he is to treat the subject in the next issue of *The Auk*, — for October, 1890, — to which I am happy to refer readers who may wish a more thorough discussion of the matter than I have been able to give.

Vol LXVI, No 376
Oct. 1890

THE AUK:

A QUARTERLY JOURNAL OF
ORNITHOLOGY.

VOL. XII.

JANUARY, 1895.

NO. I.

A WINTER ROBIN ROOST IN MISSOURI, AND OTHER
ORNITHOLOGICAL NOTES.

BY O. WIDMANN.

I. OCTOBER, 1893.

MR. WILLIAM BREWSTER and Mr. Bradford Torrey made us acquainted with the Robin's summer roost. They tell us that the roosting flights diminish rapidly after the middle of September and that by the end of the first week in October the roosts are practically deserted.

This corresponds to what is going on at the winter roost. As the Robin deserts the former, it appears at the latter, and at the particular roost of which I will speak now, the maximum of frequency is reached by the middle of October, when the roosting birds must be numbered by thousands and, perhaps, tens of thousands.

This roost is situated sixty miles northwest of St. Louis in the northeast corner of Lincoln County, Missouri. It is a wide, open marsh, between King's Lake on the west and the Mississippi River on the east, near to the former, but about two miles from the latter. The ground is highest along King's Lake and lowest

half a mile east of it, where the rain and overflow leave a deep and long slough. The marsh dries up slowly during the summer and in dry seasons the slough may even become nearly or entirely dry in fall.

The higher levels of the marsh are cultivated and, when visiting the ground in October, we may find parts of it sown to wheat while on others corn has been shocked and some of the marsh grass has been made into hay and put up in large stacks.

King's Lake is fringed by a nice growth of trees among which we recognize pinoaks, elms, soft maples, pecans, persimmons, honey locusts, willows and in the fore ground several fine specimens of red haw, covered with scarlet fruit, which together with the adjoining farm buildings make a most picturesque landscape.

The lower parts of the marsh, with the exception of the slough itself, are overgrown with reeds¹ five feet high, bending over in all directions. These reeds are matted into a regular thicket which is not easily penetrated. In the fall the reeds are dry and yellow, some cinnamon and even dark chestnut brown.

It is in these reeds that the Robin finds a safe retreat for the night, sheltered equally well from wind and cold, rain and snow, and comparatively safe from prowling enemies. During the day nothing betrays the roost. Not a Robin is seen in the neighborhood all forenoon and for several hours of the afternoon. An hour or two before sunset a few may arrive and stay in the trees along King's Lake, but nobody would suspect anything extraordinary until half an hour before sunset when the great influx begins.

The new arrivals no more fly to the trees but alight on the ground, some in the wheat field, some in the meadows, some on the corn and hay stacks, but the majority flies directly into the reeds, while the others shift from place to place until they, too, disappear. They do not come in troops like Blackbirds, but the whole air seems for a while to be filled with them, and standing in the marsh, one can easily see that they come from all points of the compass, all aiming toward a certain tract of reeds, a piece

¹ Known in botanical works as fresh-water card-grass (*Spartina cynosuroides* Willd.).

of about forty acres on some of the lowest ground where the last remains of water are now vanishing, leaving heaps of dead and dying fishes in the puddles (mostly dog, cat, and buffalo fishes).

When unmolested the Robins are not long in settling down and out of sight amongst the high and thickly matted reeds, and it is not nearly dark when the last has disappeared and nothing indicates the presence of so many thousand Robins but an occasional clatter, soon to give way to entire silence. If one enters their domain at night, they start with a scold, one by one, and not until one approaches very closely, to drop down again at no great distance.

Associating with them in the roost sleep a goodly number of Rusty Blackbirds, while the Bronzed Grackles keep somewhat apart. They arrive in troops with the last Robins and leave also a little later in the morning.

The Robin leaves its roost with the break of day, in about the same mysterious way in which it came. For a few minutes the whole air is alive with Robins, not in troops or heading in certain directions, but every one seems to follow another route, some moving at moderate heights through the misty air, but the greater number rise rapidly, though with laborious wing, heavy with dew, in order to gain the drier and purer atmosphere above, where they disappear as mere specks in the first rays of the just now rising sun.

Where are they going? The sun is hardly high enough in the sky to throw its soft light on the dew-drops in the marsh when not a single Robin is either heard or seen. Several clouds of Grackles have swept over the marsh with heavy, whistling wing and have disappeared in the distance; the marsh now seems deserted. Silence reigns. The sun's rays are beginning to soften the chilliness of the October air. The Leconte's Sparrow creeps stealthily up to an elevated position to dry its wet dress in the sunshine. Swamp and Song Sparrows leave the reeds to visit the tussocks in the oozy slough. The two Marsh Wrens come out of their retreat for moments to air their tiny wings. Snipes and Pectoral Sandpipers are at work on the softer parts of the slough. Rails sneak from under the decaying leaves of water-plants and the Marsh Hawk has occupied its favorite perch in

the swamp. A few Rusties may still linger in the neighborhood but no Robin is heard or seen. Where did they all go?

It takes considerable quantities of food to satisfy so many thousands of birds and we should therefore not wonder to find them fifty and more miles away from the roost, visiting certain known feeding grounds or wandering in search of new ones and still return in the evening to the same roost, day by day, for weeks, and some of them even for months.

With the advent of severe winter weather, generally about the middle or last part of November, the great majority leave this northern roost, presumably for another roost in more southern climes,¹ but enough remain in ordinary seasons, such as 1893-94, throughout the winter, to send detachments on foraging expeditions to regions as far away as St. Louis County. Suppose a frosty morning in midwinter, with the sun just rising in its cold splendor, finds us standing in the wooded bottomland on the right bank of the Missouri River, near Crève Cœur Lake, thirty-five miles southeast of the roost. Flickers have just left their sleeping apartments in the high old timber and are gathering on tree-tops to enjoy the first rays of the rising orb. Troops of Red-winged Blackbirds and smaller parties of Cowbirds have passed by, coming from a neighboring roost. The first Crows are appearing on the scene, tired by the uninterrupted flight from the distant roost. It is now ten minutes since the sun is in the sky, when all at a sudden the startling notes of the Robin are heard overhead and a dozen or so alight in the tree-tops to rest a minute or two. While we are yet watching them, a few more are seen coming from the same direction in the northwest and after making things lively for a few moments, calling and chattering, all are gone, proceeding on their tour through St. Louis County. We may meet them again, some time during the day, somewhere along the border of a shallow water or in the recesses of a dilapidated forest, feeding among the debris in company with several kinds of Sparrows, Bluebirds and similar braves who risk their lives to prove the mildness of a Missouri winter.

¹Since writing the above I have visited, in the last week of October, a very large roost in the flags of Indian Slough, a branch of the St. Francis River, southern Missouri, not far from the Arkansas state line.

Later in the winter, the habits of the Robin change. Those who left this roost return no more in spring. With the very first awakening of spring the old Robin's love for home surroundings no longer allows of his wandering forth and back through the land like an aimless tramp; he no longer finds pleasure or seeks safety in hiding in the swamps like a thief. His only desire is to hurry to his old breeding grounds as fast as vanishing snow and melting ice permit. He braves all dangers and the rigors of late winter weather like a man, content with the all-inspiring company of his devoted spouse.

II. APRIL 12, 1894.

What a transformation has been going on at the site of the Robin's roost! Everything looks changed! The corn-shocks have been removed, the field ploughed and the marsh-grasses, even the flags, have been burnt to the ground. For miles around the level ground looks black and bare. No Robin and no Black-bird could be expected to roost on this charred waste; and it is questionable if any birds at all visit such an uninviting solitude. But let us try; let us go over the entire tract and see if it is really forsaken.

What at first seemed a universally and equally charred plain proves by closer inspection to be a checker-board of tracts, some lately burnt, some, not yet touched by fire, have only been trampled down by grazing animals, and in the region of the slough we find small islands of high and tangled grass, which have been saved from destruction by a belt of moist ground intervening. The winter and early spring have been exceptionally dry; the water in the slough or lake, as it is called where free from plant growth, is very low, nowhere more than six inches deep. There are large mud-flats from which the water is just receding. Adjoining these are zones of mire covered with the remains of withered spatter dock, and these in turn are surrounded by a girdle of partly burnt flags.

But we have not been on the ground long before we detect our error. The marsh is not the dreary void for which we took it. We have hardly reached the old cornfield, lately turned over

to be worked into a new cornfield—if only the Mississippi will be merciful enough to spare it from an untimely flood—when we notice that on and between the large clods everything seems alive with little birds. And how busy they are! Those nearest to us run in stooping attitude as fast as they can long distances down the furrows; the others walk by fits and starts with watchful eye, darting right and left, to pick up the bread and meat which the plow so kindly exposed. Now and then one will fly up into the air, ten or more feet, and with a dexterous turn will overtake a fleeing insect. This is a flock of Titlarks or Pipits, *Anthus pensilvanicus*; perhaps a hundred of the sprightly birds, and as long as they stay with us the marsh will not be the desolate wilderness for which at first we took it. They have a way of enlivening a region in the most interesting manner. They are not always on the ploughed field, and when they leave it and take to wing as if to say good-bye forever, they will shortly be back again and try another piece of ground, the very one which has been charred so recently that the cinders still preserve the shape of the plant of which they formed the frame.

And even if not seen their endearing voice is so often in the air, that we are always cognizant of their presence. Small parties follow us to the mud-flats in the lake and even walk deliberately into the water, up to the belly, to obtain a toothsome morsel from below its surface.

Though belonging to the Wagtail family, the wagging of the tail does not play such a conspicuous rôle as one might suppose. Indeed, it is only performed when its owner is in a sort of excitement, especially when in a state of undecision, where the fluctuations of its mind are expressed in, or at least correspond with, the vacillations of its tail.

The white tail-feathers do not form such a distinguishing feature as they do in Junco, for instance. The white is but little visible when the bird takes wing, but it shows very plainly on alighting, when the fully spread tail-feathers check the force of the descent. The dress they wear this time of the year varies greatly in intensity and in color with the individual. The cinnamon-buff of the lower part is mostly of a yellow cast, but not seldom a decidedly reddish hue. The amount of dark spots

is also greatly differing and some have even a pronounced maxillary line, enclosing a white chin and running down to a black patch in the middle of the breast. Some appear to be really blue above, others decidedly greenish. Their note is a short *tsit-tsilit* and the flight at first a fitful jumping from one side to the other, then undulatory like a Goldfinch's, changing at last to a more protracted rise and fall not unlike a Horned Lark's.

But *Anthus* is not the only inhabitant of the lonely marsh. Sometimes when a flock goes up we hear besides the well-known *tsit-tsilit* another note of abrupt sharpness, which can hardly belong to the gentle Pipit. It must come from a wilder bird, who only frequents the same feeding ground and goes up when they go. It is no less a personage than Smith's Longspur, *Calcarius pictus*, and if we go carefully over the ground we shall soon make its acquaintance. It needs care, because, when alone by themselves, they do not go up as readily as *Anthus*. We may walk right among them and they will not fly up; they only run with lowered head a few yards away from us and squat until we have passed. They use any depression to hide in, and on the low grounds they have not to run far, since nearly every square yard has its crawfish hill.

Upon the slightest indication of their presence we stop and look about us, scrutinizing every foot of ground. Before long, we may see one, two, three or more around us, some with conspicuous white shoulders, light gray and dark, black-striped head and yellowish napes; others without the white on the shoulders, comparatively plain birds, females. There is an obvious similarity of the under parts with that of the Titlark.

They give us plenty of time to look at every one, but as soon as one goes up with its sharp alarm-note, immediately birds are seen to rise from twenty different points around us, go straight and in spirals up above us, all showing in a striking manner the white patches on the under wing-coverts and the white outer tail-feathers; emitting their wild *click*, they hover right above our heads, go higher and higher until they gain an altitude, where even the best field-glass can reach them no more. Though they go high, they do not go far and after a little manœuvring may come down again and settle within half a mile of the spot from where they rose.

But while we are busy watching them, a troop of thirty Golden Plovers sweeps by, low over the marsh, and seeing us, they draw a few wide circles around us in a style which in beauty and precision of execution cannot be surpassed.

When satisfied that all is safe, they alight, all at once, as if moved by a single thought, all at the very same moment, and keep standing close together, all in one bunch, all pointing the head one way, all motionless for several seconds, all eyes fixed upon the suspicious looking intruder. They are most beautiful creatures; the symmetrically shaped body with head, neck, wings, tail and legs, all in the most pleasing harmony of proportions; the large, intelligent, dark eye, set off to best advantage by a pure white curve, half encircling it and running down along the side of the neck; the back reflecting golden light, while the white underparts begin to show dark cloudings, in some few even a black area.

Now they begin to feed, running swiftly over the newly burnt ground, gathering food at every run, when suddenly they spy a large body of others of their kind, coming nearer and nearer, in a long-stretched line, filling the air with a medley of melodious whistles in many different keys—and up they go like a flash to join their passing brothers. The whole troop, perhaps 500 in all, manœuvres now in common and like a regiment of the best drilled soldiers, they perform the most astonishing evolutions in turns and sweeps, now high, now low, now all a flash of brightest gold, then all a streak of silvery white, almost vanishing from view in the distant sky, to return with lightning rapidity so low as to almost touch the ground with the tip of their long, swift pinions.

The marsh is after all not the deserted waste for which it might be taken, and though the April moon rises upon it without throwing the shadow of high and floating grasses upon slumbering Robins and Blackbirds, as it did in fall, its soft light is reflected from many a golden back of north-bound wanderers who need no shelter during night but nestle down upon a lawn-like ground, and, judging from the countless number of white spots that mark their stay, return to their favorite roost for several nights.

And we have not yet visited the slough or lake, as it is called. It is just full of life and the birds there have to-day a holiday.

They seem to feel at home and when disturbed are loath to leave. This out-of-the-way slough is at times a true asylum for the poor hunted game-birds. A few St. Louis business men have acquired the sole right to hunt with the intention to spend the Sundays here a-hunting; but the county officials found it good to enforce the law which forbids shooting on Sundays. The consequence is that the birds have a good time generally and on some days it looks as if it were a veritable paradise for Ducks and Snipes, when they feed unmolested from morn till night.

If we slowly and carefully approach, there will be a little stir among them, but soon all will resume their vocation, especially when the day is cool and birds are hungry. In such weather the Snipes do not lie still but feed all day. See, one walks in the water just in front of us, knee-deep, unmindful of our presence, continually thrusting the long bill into the mud below, immersing the face to the edge of the eye.

A party of Mallards, an equal number of males and females, is swimming in the water, only a hundred yards away. They try to hide behind the spatter dock, the females at least, but the beautiful greenheads will never for a moment turn their watchful eye from us, and if we should make the least suspicious demonstration, all would be up at once.

Six Pectoral Sandpipers, *Tringa maculata*, come with a song, and, after alighting near the edge of the water, make immediately into it and begin to feed, picking at every step.

The slough forms here a small lake, a few inches deep, in fact just deep enough to allow two Yellow-legs, *Totanus flavipes*, to wade all over its midst, while the Pectoral Sandpipers with their shorter legs must remain along its edge. Thus they feed together for hours, if undisturbed, and we have ample opportunity to compare their appearance and behavior. At first sight, their dress seems pretty much alike, but the back of *Totanus* is finer and darker mottled, and viewed from the side the black wing-tips form a conspicuous patch, completely hiding the white upper tail-coverts, while in *Tringa* the corresponding region shows a white area, formed by the upper and lower tail-coverts. The superciliary in both birds is only obvious when the birds are seen from in front; the face of *Tringa* is more Snipe-like, the bill of *Totanus* is

darker, longer, straighter. There is no jerking with the head in Tringa as in Totanus. The former goes up with a Swallow-like note, the latter with a loud whistle, which it sometimes utters while in the water, and not seldom does it stretch its leg or raise its wings straight overhead, to show the pretty lining of that powerful wing which makes him such a wonderfully swift flyer.

As the Yellow-legs go up and fly away from us, the white tail is a striking object and when on wing the long and slender body, with legs sticking way out behind, is a peculiar sight. The white outer tail-feather of Tringa is just visible as a white margin and when the bird is speeding through the air it has some resemblance to a Swallow.

The Pectorals, though there are always a few together, seem disposed to be quarrelsome at this season, and frequent bickerings occur, in which they jump up against each other and utter something like bad language.

Following the border of the slough we come upon many solitary Snipes; they go up but do not leave the slough, which is about a mile in length, and has the shape of an S. In the peninsulas formed by the curves of the S the grass and weeds have escaped the fire entirely and remain in their original wilderness. Here is where the Savanna and Swamp Sparrows find a retreat to their liking, and the old Red-winged Blackbird is occupying a perch on one of the few small bushes, in which his last year's nest is still hanging. He declares with wonderful perseverance over and over again that he is the owner of the patch.

A pair of Shovellers, *Spatula clypeata*, fly low over the slough, and, as our eyes follow admiringly the showy birds, we detect a bunch of Blue-winged Teals, which upon nearer approach go up in pairs with a soft, peculiar whistle. Troops of Pipits and Golden Plovers come towards evening to bathe and drink and leave again. On a part of the marsh set aside for pasturage and with the old grass pretty thick in places, a number of small birds spring up and fly a few rods, low over the ground, and drop out of sight. Using a little strategy we succeed in driving one to the border of the slough, where he perches in full view and allows an easy identification: a Leconte Sparrow in high plumage, deep yellow head and neck with almost black stripes and markings in sharp contrast.

Approaching stealthily a small, isolated pool a pair of Baldpates is very much surprised to be so rudely disturbed and starts off with exclamations of genuine disgust.

We leave the marsh and as we near the farm a fine old Marsh Hawk, with azure on his back and a ray of sunset scattered over the breast, is started from a fence post. Traversing a patch of high weeds we are greeted on all sides by farewells of a restless throng of Tree Sparrows, assembled here to fix the day or rather the night for the approaching departure. With the exception of the Red-wings all birds, which we have met to-day, are only transient guests, and another week or two will carry off the last of them to the northward. The scene will then be changed and will be very different from what we saw to-day, since other forms of life will take the places of the departed ones.

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Destruction of Robins in a Storm.—There occurred on Long Island about midnight, Friday, August 29, the most severe electric storm I have ever witnessed. During my forty years of residence at Floral Park, I have never known a summer storm so severe as to kill any mature bird in full strength, but the one above referred to annihilated the Robins that live in the trees about my lawn. Thirty-six were picked up the next morning on about an acre of ground, and others in the near vicinity brought the total up to about fifty. The English Sparrows were very abundant also but very few were killed; the Starlings escaped uninjured as far as I can learn. I have hardly seen a Robin since that fatal night. The storm was accompanied by high wind although not severe enough to uproot trees or break branches to any considerable extent, but it was accompanied by the heaviest downpour of rain I have seen in many years and lasted for a considerable time.

The birds were evidently blown out of the trees where they were roosting and perished from the awful wetting they were subjected to on the ground.

—JOHN LEWIS CHILDS, *Floral Park, N. Y.* ~~Auk~~ 30, Oct., 1902. p. 9

Morning Awakening Notes at Jefferson Highland, N. H.—Mr. Francis H. Allen in his general note in 'The Auk,' January, 1915, p. 110, again calls in question the genuineness of the early songs which precede the singing of the Robin as morning songs given in response to the break of day, still regarding them as songs of night. Others may share in some measure his incredulity. I desire, therefore, that my records obtained at Jefferson Highland, N. H., should remove this doubt, for they show conclusively season by season that there not only do Song Sparrows and Chipping Sparrows habitually sing several times before the Robin, but that Wood Pewee and Alder Flycatcher are always much earlier singers, and that

and adventitious, due to the caprice of the bird, occasionally heard, but not to be regularly looked for and with certainty heard. These earliest songs after the first light of dawn are unfailingly given and can be looked for with certainty of realization.

In the hour preceding visible dawn, which in days of earliest sunrise at Jefferson is 2.30 o'clock or a little before, I have very, very few times heard any expression of song, yet I have often been awake at one o'clock and remained awake listening carefully until I have gone out at two o'clock or a few minutes thereafter. Whereas, as the time of 2.30 approaches, it is usual to hear the first songs from one, two, or three birds which are within range of hearing, and these songs are followed by repetitions from the same birds or from other birds at infrequent intervals for a time, until their awakening is more complete. So it has been my practice to be out shortly after 2 o'clock, when not before; in season for these first responses to the break of day, and experience has shown that the birds' awakening begins with these songs, given when the dawn has already visibly brightened the eastern sky.

The Ovenbird's early flight song, which is heard quite unfailingly at dawn, is its twilight song, equally so in the morning as in the evening and late afternoon. It can be depended upon, at least in the woodlands of Jefferson Highland, and it must be borne in mind that my testimony on the whole subject of the morning awakening is the result of my experience in this mountain hamlet, where there is broad expanse of sky and complete silence reigns, when the day opens, broken only by the birds as they awake and sing.—HORACE W. WRIGHT, *Boston, Mass.*

Auk. xxii. Apr. 1915. p. 240-241.